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THE UNIVERSITY OF ALBERTA

AN EXAMINATION OF THE ALBERTA TAX REDUCTION SUBSIDY FOR EDUCATION

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DIVISION OF EDUCATIONAL ADMINISTRATION

by

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ABSTRACT OF THESIS

In 1955 the Alberta Provincial Government introduced a form of school grant called the Tax Reduction Subsidy. As suggested by its title this grant was intended to reduce taxes. From the outset, however, it was the center of controversy, and after two years was discontinued.

It is the purpose of this thesis to study the tax reduction subsidy in order to reveal, if possible, the causes of its failure. This is done in two stages. First, the study examines the administration of the scheme and second, it examines and analyzes the distribution of the subsidy aid and its effects.

From the standpoint of administration of a grant scheme it is proposed that grant formulae should be (1) simple to administer, (2) definite in application, that is objective rather than subjective, (3) economic, and (4) free from excess interference with local autonomy. This part of the examination, which is chiefly documentary in nature, finds that the Tax Reduction Subsidy failed to come up to these standards.

The second stage of this study adopts the following criteria by which to analyze and examine the Tax Reduction Subsidy for faulty principles of distributing aid: (1) a basic instructional program of $3,710 per classroom, (2) a perfect correlation between ability and aid as illustrated by the foundation program concept, and (3) equalization of tax relief by the establishment of a qualifying mill rate of 25 mills--calculated according to the foundation program concept. In addition, the subsidy is examined for its total consequences in combination with other grants. The findings can be briefly summarized. The

subsidy reduced the variability in mill rates which existed in 1954 and like any other grant or government aid it gave tax relief to property owners. However, it is shown that the Tax Reduction Subsidy by itself is ineffective in (1) establishing a basic program, (2) equalizing aid, and (3) equalizing tax relief. Furthermore, the scheme counteracted the equalization grants in effect at the time; it failed to help those districts which were below average in instructional expenditures in 1954 to compete for better services in 1955; it was less effective than flat grants in equalizing aid and tax relief. A comparison of 1954 and 1955 tax rates substantiates the earlier findings with respect to the failure of the subsidy to equalize tax relief.

In general, the examination of the Tax Reduction Subsidy corroborated many of the early criticisms and expressions of concern. The reasons for its failure seem to be twofold; one reason is attributed to its administrative weaknesses and the other is attributed to its faulty principles of distribution.

ACKNOWLEDGEMENTS

I wish to express my grateful appreciation to my committee, Dr. G.L. Mowat (adviser), Dr. H.T. Sparby, and Mr. L.D. Nelson, for their patient guidance and their advice. I also wish to acknowledge the cooperation of the many secretaries of the counties and divisions of Alberta who returned copies of their TRS claim forms; I wish to acknowledge the suggestions and criticisms offered by the following: Dr. A.W. Reeves, Chairman of Division of Administration in the Faculty of Education, Mr. H.E. Todd, Secretary-Treasurer of Lacombe School Division, Mr. L.P. Williams, Secretary-Treasurer of the County of Stettler, and Mrs. Lillian Scott, Secretary-Treasurer of the Red Deer Public School Board.

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CHAPTER I

INTRODUCTION

I. PURPOSE OF THE STUDY

In 1955, the Alberta Provincial Government introduced a form of school grant called the Tax Reduction Subsidy. The original intent of this grant was to reduce school tax rates to 25 mills and stabilize them at that level. From the outset it was the center of controversy. First, its application was apparently so difficult that the original method of calculation was used for one year only. Secondly, the scheme of payment was discontinued after two years. Whether the failure of the Tax Reduction Subsidy resulted from difficulties in administering or interpreting the new formula or from faulty principles of distributing money may still be a question. It is the purpose of this thesis to shed light on this question by an examination and analysis of the chief characteristics of the Tax Reduction Subsidy.

II. BACKGROUND

The System of Grants

The British North America Act of 1867 assigned certain powers to provincial governments. Section 93 of the Act prescribed that:

> In and for each Province the Legislature may exclusively make laws in relation to Education, according to the following Provision . . .

No definite policies were set with respect to financing education but the Act clearly put the responsibility of education (including

financing) on the provincial governments. The School Act of Alberta indicates the acceptance of this responsibility in its preamble:

> Her MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Alberta, enacts as follows:[1]

Not only must the provincial government bear the responsibility of educational legislation but it must see that the legislation is implemented. Finally, it must be responsible for the consequences of legislation, one aspect of which requires the sharing of costs by local and provincial governments. Financing of education at the local level can be burdensome to the poorer districts unless the province shares costs in an equitable manner. Therefore, the system of sharing is of immediate concern to all.

The Alberta Government has accepted its responsibility in sharing the costs of education through a system of school grants. When the Tax Reduction Subsidy was introduced, grants were being distributed according to the Grants Regulations[2] effective April, 1956. Because the Tax Reduction Subsidy introduced a radical change in the principle of distributing aid, it was thought advisable to describe the chief characteristics of the above Grants Regulations in order to appreciate more fully the scheme under examination.

Chief characteristics of the system. Flat grants paid according to Sections 1 and 3(a) of the Regulations[3] were based on a fixed amount per

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[1] Government of the Province of Alberta, The School Act (Edmonton: Queen's Printer, 1952), p. 1.

[2] Appendix I. [3] *Ibid.*

pupil and per teacher. They were simple to calculate and easily understood. They did not differentiate between the rich and poor districts but were directly proportional to need as measured by the number of pupils and teachers within a school system.

The equalization grant, under Section 3(b) of the Regulations,[4] paid the greatest rate per pupil to those districts with the least assessment per pupil. A similar grant, under Section 4, paid the greatest rate per classroom to those districts with the least assessment per classroom. These grants recognized the relative abilities of districts to support their educational programs.

There were two types of transportation grants. The first, under Section 2, paid a fixed percentage of the actual expenditures for the conveyance of pupils or for expenditures made to parents or guardians for other arrangements in lieu of conveyance or maintenance of pupils. Since this grant was a percentage grant, the amount paid to any district depended upon the actual cost of transportation.

The second grant in aid of transportation was related to the equalization grants under Sections 3(b) and 4 of the Regulations.[5] The unique characteristic of this grant can be summarized in this manner: children transported from a "non-operating" district were equated to classrooms. The "classrooms" so derived were added to the number of classrooms actually in operation. The effect was to increase equalization grants earned by the majority of districts that operated pupil

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[4] Ibid.

[5] Appendix I.

transportation systems.

III. THE TAX REDUCTION SUBSIDY

The 1956 grants schedule, as summarized above, made provisions for flat, percentage and equalization grants. The amounts of grants paid were determined by such measures of need for services as the pupil, the teacher, the classroom. Each type of grant served to share the costs of education between local and provincial governments without regard for the education tax levy at the local level.

The Tax Reduction Subsidy introduced a new factor into the grants picture:

> This subsidy was added to the grants for 1955 in an endeavor to stabilize requisition rates for school boards at 25 mills. Any school district, division or county which requisitioned its collecting authorities at a rate not exceeding 25 mills (exclusive of certain legally authorized special and additional requisitions) was paid a tax reduction subsidy in the amount determined by subtracting 25 from the qualifying mill rate and multiplying the result by the total assessment as approved by the Minister of Education. The qualifying mill rate was defined as the 1954 average basic requisition rate less the amount expended in 1954 from current revenue for capital purposes converted into mills, or 2.5 mills, whichever was the lesser, plus the amount of the operational deficit in 1954 converted into mills. All calculations used in arriving at the qualifying rate were based on the total assessment as of December 31, 1953.[6]

IV. THE NEED FOR THE STUDY

Thus the government hoped that the Tax Reduction Subsidy would operate as an incentive to school boards to reduce and thereafter maintain

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[6] Department of Education, Annual Report, (Edmonton, Queen's Printer, 1955), p. 104.

stable rates of taxation. The assumption seems to have been that such incentive would counteract trends toward higher costs of education. This assumption must have rested upon a further assumption, namely, that there was little or no relationship between the costs of education and the costs of other goods and services in the economy as a whole. A public finance scheme based upon these assumptions warrants an examination.

Nevertheless, on the surface at least, the Tax Reduction Subsidy possessed certain features which resembled those favored by persons who had studied educational finance. It was intended to result in a uniform education tax levy. It reduced taxes and it shared costs. Such results seem to have been supported in various Canadian writings.

Municipal authorities have long been concerned about the school tax problem. The Royal Commission on Taxation, commonly known as the Judge Report, stated that the strongest representations made to the Commission centered around the question of school taxes. The report made this statement about financial support: "There was unanimous opinion, both urban and rural, that 50% of the school support should be from the Provincial Government."[7] In a brief presented to the same Commission it was stated on behalf of the City of Calgary that the successful resolution of the taxation issue was the most vital problem facing society at the time.[8] The implication here seems to be that the municipal authorities

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[7] Alberta Educational Council, Education at Market Prices (a review of the Report of the Royal Commission on Taxation commonly known as The Judge Report, September, 1948), p. 2.

[8] Ibid.

wanted more aid to relieve local tax rates.

The Canadian Trustees' Association were also concerned about the need for greater financial assistance to help share the costs of education. In fact they were so concerned they sponsored an investigation of school finance in Canada with Dr. M. E. LaZerte as research director. In his two hundred and twenty-nine page report he said:

> It is a fact that society in general has a responsibility in educating today's children and that the responsibility must not rest primarialy on owners of real property in school districts. . . . . . . This report begins with an account of present conditions and current practices in the ten provinces. Inter-provincial comparisons are then made .. . . that recommendations, if indicated, may be made that will increase the sum total of money available for the schools and distribute more widely and more equitably the responsibility for providing money for education.[9]

Undoubtedly, the report's recommendation for greater assistance to local governments for financing education would to this day be heartily approved by municipal authorities. The additional assistance given by the Tax Reduction Subsidy seemed to be supported by LaZerte--at least some aspects of the scheme. He is reported to have stated that the Tax Reduction Subsidy introduced by the Alberta Government in 1955 was the only move so far to be taken by the provinces toward equalizing the costs of education. He intimated that the plan gave the municipalities of the province a reduced tax rate and greater equalization of school costs.[10]

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[9] M. E. LaZerte, M.A., Ph.D., F.R.S.A., Research Director, School Finance in Canada (The Canadian School Trustees' Association, School Finance Research Committee, February, 1955), p. 2.

[10] A. G. Andrews (ed.), "Equalization of Schools Advocated by Dr. LaZerte," The Alberta School Trustee, (September, 1955), p. 17.

Moreover, the aim of the Tax Reduction Subsidy scheme to establish a qualifying mill rate of 25 mills seemed to be somewhat similar to the principle favored by Cameron--equalization along with fixed mill rates. He commented as follows:

> The simplest and probably the soundest kind of equalization grant is the difference between some standard sum and the product of a fixed rate of local taxation. For example,--and we omit here many complications--the grant might be the difference between fifty dollars per child and the product of a tax rate of one mill. Such a grant would guarantee that each local board, no matter what its wealth, would receive upon levying a tax of one mill the amount of fifty dollars per pupil in tax and grants. The grant is said to equalize a school program of fifty dollars per pupil.[11]

Cameron agreed that some of the burden of cost should fall on local taxes but, he pointed out, this resulted in inequality because tax levies varied greatly from one locality to another. "One important aim of a system of school finance," he said, "must be to make these inequalities as ineffective as possible. In other words, it must aim at equalization."[12] The Tax Reduction Subsidy was designed, however, to produce equality of local tax rates only.

Graduate studies have also indicated anxiety over the problem of sharing costs. Argue referred to his study as a "laboratory study involving Mort's principles of equalization."[13] He emphasized the need for distributing aid according to some measure of ability to support the cost of education. Reeves proposed a plan designed to achieve both

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[11] Maxwell A. Cameron, Property Taxation and School Finance in Canada (The Canada and Newfoundland Education Association, 1945), p. 38.

[12] Ibid., p. 48.

[13] Kenneth F. Argue, "A Small Fund Equalization Grant for Alberta Schools" (unpublished paper on file at the University of Alberta, Edmonton, 1937).

equalization of financial aid and educational opportunity.[14] Mowat proposed a plan whereby transportation costs could be included in an equalization plan.[15] Gibb concluded in his study that one of the contributing factors to the existing inequality in educational opportunity was the failure to apportion all new educational grants on an equalization basis.[16] These studies centered around the problem of distributing provincial funds in a manner which would equalize local tax burdens for education. The Tax Reduction Subsidy was introduced as another method of equalizing the tax burden.

In spite of some general resemblances between features of the Tax Reduction Subsidy and the expressions of need for equalizing the tax burden contained in the above, there was early concern regarding the manner in which the Subsidy might achieve such ends as reduced taxes, shared costs and fixed mill rates. The above studies and other literature on school finance did not for instance propose a limitation on local effort whereas the Tax Reduction Subsidy would limit tax rates to 25 mills. The method of sharing school costs too, differed from that

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[14] Arthur W. Reeves, "The Equalization of Educational Opportunity in the Province of Alberta" (unpublished Doctor's dissertation, Stanford University, 1949).

[15] Gordon Leslie Mowat, "A Plan for Recognizing Pupil Transportation Costs in the Province of Alberta for Purposes of the Equalization of Educational Opportunity" (unpublished Doctor's dissertation, Stanford University, 1953).

[16] A.A. Gibb, "The Setting up of a Minimum Educational Program in Alberta and an Investigation of its Cost to the Provincial Government" (unpublished Bachelor of Education thesis, Rutherford Library, University of Alberta, 1942).

proposed by graduate studies and other literature on school finance. Thus, the anticipated long range effect of limiting local effort, along with the scheme's method of sharing costs and the administration of the plan soon stirred up dissension.

No sooner had the Tax Reduction Subsidy been introduced than educationists and school boards alike expressed concern over the new grants device. The Alberta Teachers' Association Executive presented a resolution at their Annual General Meeting, held in April, 1955, in which they expressed opposition to the Subsidy. Their action received a degree of sympathetic comment from The Alberta Trustees' Association. The following comment appeared in the official trustees' Magazine:

> Tax Reduction Subsidy:
> Teachers, as well as trustees, seem to be very much concerned as to the ultimate effect of the tax reduction policy, but from a different viewpoint altogether. Trustees welcome any policy which will have the effect of reducing the school tax, but in some instances school boards are not at all cheerful as to how this reduction can be accomplished.
>
> The Alberta Teachers' Executive, in its resolution, seemed to be very doubtful as to the effect such a policy would have on educational standards. The resolution reads as follows:
>
> WHEREAS a minimum foundation program for education is essential, and
>
> WHEREAS regulations governing the tax reduction subsidy, if continued, will perpetuate inadequate professional standards, services and school accommodations, and
>
> WHEREAS the making of conditional grants is undemocratic, in that it imposes provincial control on local authorities;
>
> BE IT RESOLVED that the Alberta Teachers' Association is opposed to the regulations under which the tax reduction subsidy is granted to school boards, because they are detrimental to

education.[17]

The above resolution was defeated, but at the same meeting the following resolutions were passed:

> BE IT RESOLVED that this annual general meeting of the Alberta Teachers' Association congratulate the Government of the Province of Alberta on the substantial increase in grants given to education this year. (Carried)
>
> BE IT RESOLVED that this motion be recorded as unanimous. (Carried)[18]

These resolutions were indicative of early discussion and concern.

In his Annual Report, G. S. Lakie, then president of the Alberta Teachers' Association, commended the government, but not without some reservations, for the decision to pay fifty per cent of the cost of education. He expressed concern over the Tax Reduction Subsidy thus:

> Your Alberta Teachers' Association stands for a minimum foundation educational program within the province, and the school boards, if they wished, (and we hope they will) could have an educational program better than the basic minimum foundation program. We fear very much, due to the way in which this tax reduction subsidy is going to work, school boards will not increase their mill rate. Not that we think this a desirable thing in itself, but with the needs for expanding school grants and the increasing number of teachers needed, educational costs will rise. If school boards must hold their mill rate down to the 1954 level, then we fear there is going to be a ceiling placed on education in the province of Alberta--not a floor.[19]

Similarly, he expressed concern over the increasing subordination

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[17] Editorial, Tax Reduction Subsidy (The Alberta School Trustee, May 1955), pp. 2-3.

[18] Resolutions brought before the Annual General Meeting, 1955, Resolution C 49/55, on file at the ATA office.

[19] G. S. Lakie, "Annual Report of the President" (The ATA Magazine, May 1955), pp. 14-15.

of local school boards to the Provincial Department of Education through financial controls. He hoped that the government would change the method of distributing the Tax Reduction Subsidy funds without changing the amount. In closing he stated:

> . . . This is critical of a substantial increase in provincial assistance to education and we would not be critical unless we felt that it was our responsibility to the public so to be.[20]

Likewise, the editor of the ATA Magazine was concerned about the ultimate effect of the Tax Reduction Subsidy on local autonomy. Provincial control over school boards' financial policies, the editorial pointed out, could prove to be an impediment to normal growth in school systems.[21]

The mixed feelings of the Alberta Teachers' Association were similar to those of a noted Canadian educator, Dr. M. E. LaZerte whose research in finance has already been quoted. Though it has been indicated that he showed some sympathy for the scheme, he posed two searching questions which indicated that he was disturbed about the possible long range effects of the subsidy. He asked:

> Does the legislation freeze educational expenditures at their 1954 level other than by increased operational grants and increased assessment revenues?
>
> Does the subsidy plan penalize school districts which operated most economically in 1954 and favor those that spent freely?[22]

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[20] Ibid.

[21] Eric C. Ansley (ed.), "Editorial", The ATA Magazine, (March, 1955), p. 6.

[22] A. G. Andrews (ed.), op. cit.

Ivor Dent referred briefly to the Tax Reduction Subsidy in his study. He used a small sample of 15 districts to investigate the relative effects of the Tax Reduction Subsidy upon various areas. He suggested that the urban areas seemed to get the greater benefit. He also indicated that an equalization grant should have the effect of decreasing differences in educational opportunity between wealthier and poorer areas.[23] By implication, he was not certain that this was the case with the Tax Reduction Subsidy.

Others not directly concerned with education were skeptical about the new formula for distributing grants. An editorial in the Calgary Herald said, "Calgary stands to gain not one cent under the strange formula devised by the provincial government."[24] The same editorial reported a "flare-up" over this grant between the Minister of Education and the Mayor of Calgary.

Controversies aroused by the Tax Reduction Subsidy suggested that an analysis of the subsidy would be timely. The urge to reduce education taxes may still be foremost in the minds of many tax payers. The Tax Reduction Subsidy seemed to possess general features which must have appeared desirable initially, but which excited opposition in their application and effect. Will similar schemes be advocated in the future? If so, on what basis shall they be judged? An appraisal of the Tax

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[23] I. G. Dent, "The Evolution of School Grants in Alberta" (unpublished Master's thesis, University of Alberta, 1956), pp. 79-93.

[24] Editorial in the Edmonton Journal, April 6, 1955.

Reduction Subsidy, in effect an examination of a controversial concept, should provide some future guidance. Such is the purpose and need of this study.

V. THE PROBLEM

What were the strengths and weaknesses of the Tax Reduction Subsidy? To facilitate the establishment of criteria against which to judge the Subsidy, the following sub-problems were isolated for investigation:

I. What, if any, were the problems in administering and interpreting the formula? Specifically:

1. Was the formula too complex?
2. Could the formula be adhered to?
3. Was the scheme costly to administer?
4. How did the scheme affect local autonomy?

II. Were faulty principles involved in the distribution of the subsidy and if so what were they:

1. With respect to mill rates?
2. With respect to ability of a school system to pay?
3. With respect to the level of education offered?

VI. PROCEDURES

Collection of Data

Form 315-1 on file at the Department of Education provided the data on grants payable in 1956 to the divisions and counties of Alberta and their respective assessments as at December 31, 1954. These data

are summarized in Appendix IV. Data pertaining to instructional expenditures, operating classrooms and enrollments were taken from tables in the Annual Reports of the Department of Education. Information and data pertaining to certain aspects of the Tax Reduction Subsidy were taken from both the annual reports and the 1955 Budget Report Forms on file at the Department of Education. The claim forms for the subsidy grant and memos were in the same file as the Budget Report Forms.

The criteria for evaluation were drawn from professional books on educational finance, university studies and theses on the problem of school finance, current periodical literature, reports of educational survey commissions, together with official statements of the department.

Definitions

The following terms and expressions were regarded as having special meaning for this study:

(i) TRS-- This term appeared in many articles and statistical tables. It is an abbreviated form of the term Tax Reduction Subsidy.

(ii) Instructional expenditures-- The cost of instruction shall be interpreted as the sum of the costs of two items listed in the Annual Reports of the Department of Education under the headings (1) Teachers' Salaries and (2) Other Instruction.

(iii) Instructional grants-- These are grants according to Sections 1, 3 and 4 of the Grants Regulations of the Department of Education. The indirect effect of transportation on the equalization grants are included unless

otherwise indicated.

(iv) Excess income-- When the total support of a particular cost item is greater than the cost of the item, the sum by which the support of the item exceeds the cost of the item shall be interpreted as excess income.

(v) Rank order of ability-- The district having the largest assessment per classroom shall be ranked 1 in ability and the districts with the least assessment per classroom shall be ranked 59. All intervening districts are to be ranked accordingly.

(vi) Rank order of aid-- The districts receiving the largest provincial aid per classroom shall be ranked 59 and the district receiving the least aid per classroom shall be ranked 1. All intervening districts are to be ranked accordingly.

(vii) Correlation-- This term shall be interpreted as a rank-order correlation according to Spearman's formula $\gamma = 1 - \frac{6 \sum D^2}{N(N^2-1)}$, where $\sum D^2$ represents the sum of the differences in rank and N represents the number of cases.[25]

(viii) Qualifying mill rate-- It shall be the mandatory minimum tax rate which would qualify a particular district to be eligible for equalization grants under the foundation program concept.

(ix) Classroom-- This term shall be interpreted as an operating classroom.

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[25] Henry E. Garrett, Statistics in Psychology and Education, New York: Longmans, Green and Co., 1954, p. 355.

Note that the rank orders as defined under v and vi, page 15, are reversed in order to give a positive correlation between them.

Organization of the Thesis

The study is divided into seven chapters. The introductory portion comprises three chapters, the main body three chapters, and the conclusion one chapter. A brief outline shows the content of each section.

Introduction. Chapter I establishes the problem, points out the need for the study, gives the general source of the data and the evaluative criteria, and defines terms. Chapter II refers to the general aspects of the legislation of the TRS, outlines the procedure required to qualify for the subsidy, and explains the calculation of the TRS grant. Chapter III develops administrative criteria for examining this aspect of the scheme along with criteria based on the foundation program concept to analyze its effect on the establishment of a basic program, its effect on equalization of aid, and its effect on tax relief.

Body of the thesis. Chapter IV examines the TRS with respect to the criteria set forth in Chapter III under administration of a grant scheme. Chapter V investigates the TRS in principle as if it were the only grant paid. Chapter VI analyzes the financial consequences of the TRS combined with other grants in existence at the time of its introduction.

Conclusion. Chapter VII summarizes the conclusions.

CHAPTER II

GENERAL ASPECTS OF THE TAX REDUCTION SUBSIDY

Chapter II briefly refers to general aspects of the TRS scheme. For proper orientation, one needs to know something about the legislation of the TRS and the opposition, if any, to the new scheme. In addition, one needs to be aware of the procedure which the school board must follow in order to qualify for the grant.

I. LEGISLATION

A forewarning. Prior to the legislation of the TRS for educational purposes, a similar scheme had been introduced by the government in 1951. A brief preview of the Municipal Assistance Act of 1951 would indicate that in some respects the municipal "tax reduction subsidy" resembled the TRS under study.

Shortly after the Second World War skyrocketing debt figures (and mill rates) gradually increased in momentum. "Total outstanding debt almost tripled, rising from $35.6 million at the end of 1946 to $102.6 million at the end of 1951," said Professor Hanson of the University of Alberta in an essay in the Canadian Tax Journal in 1953.[1]

On the other hand, the provincial government revenues had risen for many years. A budget speech revealed that by 1953 Alberta was the

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[1] Professor Hanson, "Provincial Grants in Alberta," (essay written for the Canadian Tax Journal, September, 1953), pp. 1-16. (Mimeographed)

first province to accumulate cash surpluses and investments in excess of its total indebtedness.[2] Hanson pointed out that by 1951 the provincial government administration had begun to enjoy "the reputation of being a prudent, economy-minded government in the traditional sense."[3]

But this did not free the provincial government from its responsibilities to the municipalities nor, as a matter of fact, did it shy away from them. The financial problems of the municipalities gave the parent government much uneasiness. Hanson said:

> The Alberta local governments, however, have fared less well and have given the provincial governments much concern. . . . The province, after years of concern with its own debt and liquid position, has finally come to regard local government finance as its primary concern.[4]

As early as 1947, the government had taken steps to assist the municipalities when it partly implemented the recommendations of its own commission--the Judge Report--which investigated provincial-municipal finance.[5] However, expenditures, debt, and tax rates continued to rise. The government continued to search for an answer to the problem.

Eventually, after local governments had become burdened with rising tax rates and large municipal debts in order to keep up with an

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[2] Budget Speeches, March 6, 1953, on file at the Provincial Government Library, pp. 1-29.

[3] Hanson, op. cit., p. 1.

[4] *Ibid.*, p. 2.

[5] *Ibid.*

expanding economy and at the same time recover from war-stalled building programs such as with schools, the provincial government passed the Municipal Assistance Act in 1951 which in essence was a tax reduction subsidy aimed at checking rising costs and reducing mill rates. By this Act, 40 per cent of the annual gasoline tax collections were distributed as follows:

> From this fund the government paid in 1951-52 a "tax reduction subsidy" not exceeding three mills annually to all tax-levying units which reduced or retained their aggregate mill rate below or at the highest rate levied on a comparable basis of assessment in any year after 1949. Assessment limitations were defined by the province. The subsidy was therefore conditional upon tax reductions and the provincial government stated that it sought to check the rise in local government expenditures and taxes.
>
> After deducting the amount required for tax reduction subsidies, the balance of the appropriation was distributed on the basis of the assessment of the units as of December 31 of the previous year. The level of this grant plainly depended upon the extent to which municipalities reduced their mill rates.[6]

But Hanson had some harsh words for the subsidy:

> The whole scheme, including the tax reduction subsidy, the unconditional municipal revenue grant, and the equalization grants, is unusual, and it defies analysis in brief terms. The purpose is essentially to check the rise in the level of property taxation and local expenditures.
>
> On the score of "high taxation," the tax reduction subsidy is not a good countercyclical device. Property taxes, despite the desperate cries that the limits have been reached, are relatively low compared to the 1920's and 1930's. In Alberta, property taxes equalled about 6 per cent of personal income in 1926, and 12 per cent in 1933, about 7 per cent in 1939, and about 4 per cent in 1951. The time for tax reduction subsidies would be when incomes fall and property taxes come to absorb a higher percentage of those incomes.[7]

In all probability, the fact that the Act had to be amended in 1952 and

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[6] Ibid., p. 11.

[7] Ibid., p. 12.

again in 1953 would suggest that the scheme encountered early difficulties. Hanson's concluding remarks on the Act(s) were a kind of epitaph.

> The municipal assistance grants scheme was amended in 1953. The tax reduction subsidy proved ineffective in checking local expenditures and the cost-of-living provision was a nightmare to the accountants and the auditors. It was therefore abolished.[8]

Despite the death of the municipal tax reduction subsidy in 1953, the government continued to search for a formula which would curb local government expenditures. Budget speeches from 1953 to 1955 revealed government concern about increasing costs and about effective measures to control them.

Budget speeches and their implications. In his budget speech on March 5, 1951, Premier Manning had referred to the problem of rising taxes. He had pointed out that his government was aware of the unprecedented expansion taking place in the provincial economy. He had said that rapid expansion led to increased public expenditures which progressive development and rapid growth had made necessary.[9]

In 1953, the budget speech referred to practical measures to assist local governments to attain financial independence and stability. As a matter of fact the speech showed that the central purpose of the municipal tax reduction subsidy as outlined in the Municipal Assistance Act of 1951

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[8] Ibid., pp. 13-14.

[9] Budget Speeches, on file at the Provincial Government Library.

survived in the revised Municipal Assistance Act of 1953:

> Its purpose and objective is to assist municipalities in attaining a position of financial stability in order that the burden of municipal taxation may be progressively reduced.[10]

Again in 1954, Premier Manning's budget speech referred to the rapid expansion of the provincial economy and reiterated the need to eliminate large scale municipal borrowing and the need to reduce taxation. He expressed some concern over municipal and school expenditures being financed to an ever increasing degree by the provincial treasury. He recognized the importance of preserving the greatest possible measure of local autonomy by having sources of revenue under the control and jurisdiction of local governments.[11]

In 1955 the government gave the impression in its budget speech that, through the large appropriations of government funds to the Department of Education, equalization of educational opportunity had been substantially achieved. The speech stated that 28.27 per cent of total estimated government expenditures had been set aside for education and therefore steps would be taken to stop rising educational costs and at the same time to give some relief in local tax rates. The speech contained these significant remarks:

> . . . but the local rates of school taxation have constantly risen to the point where effective measures must now be undertaken to achieve some control of rising costs and some actual reduction in the rates of local taxation.[12]

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[10] _Ibid._, March 6, 1953.

[11] _Ibid._, March 5, 1954.

[12] _Ibid._, March 4, 1955.

Thus the Tax Reduction Regulations of 1955 were conceived as the "effective measures" which the government hoped would stabilize costs of education and reduce tax rates.

The new scheme. This was the way the Minister of Education explained the new grants to the Legislature in March, 1955:

> The tax reduction subsidy grants are the outstanding new feature of the government's program for education this year.
>
> May I emphasize immediately these grants do not involve any arbitrary fixing of mill rates. Boards will still be free to requisition upon municipalities as they have done in the past. But if they are able and willing to meet certain conditions, they will qualify for additional grants to compensate for loss of revenue from local sources. Boards may choose to qualify or not to qualify for these additional grants and the requisition power upon municipalities is not impaired in any way whatsoever. The whole proposition is entirely voluntary.
>
> The government's purpose in providing these grants which account for the major portion of the increase in the school grants appropriation is to enable school boards to reduce the present heavy burden of educational costs to the local municipal ratepayer. The formula under which these grants will be paid is the result of a great deal of intensive study by the Department of Education over the past six months.[13]

Apparently, in reply to questions further explanation was given:

> Mr. Aalborg answered criticisms voiced earlier by J. Harper Prowse, Liberal leader of the opposition, who said the proposed arrangement would assist those who need aid least.
>
> "It should be apparent this is not the sase," Mr. Aalborg said after outlining the grants system proposed this year.
>
> He said the equalization grants are up and added that the school divisions with the highest mill rates will receive most under the subsidy grants, if they are able to qualify.[14]

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[13] Edmonton Journal, March 10, 1955.

[14] Ibid.

The TRS came into effect April 1, 1956 under the following regulations:

> 21 (1) Any district or division that in 1955 requisitions upon the municipality or municipalities which are its collecting authorities at a rate not exceeding 25 mills (exclusive of certain legally authorized special and additional requisitions) shall be paid a tax reduction subsidy grant in the amount determined by subtracting 25 from the qualifying mill rate hereinafter defined and multiplying the result by the total assessment as of December 31, 1954, or such total assessment figure as may be approved by the Minister of Education.
>
> (2) In each district and division the qualifying mill rate shall be the 1954 average basic requisition rate less the amount expended in 1954 from current revenue for capital purposes converted into mills, or 2.5 mills, whichever is the lesser, plus the amount of the operational deficit in 1954 converted into mills.
>
> (3) Notwithstanding the preceding provisions, the 1955 requisition may contain over and above the basic 25 mills, additional mills for the recovery of deficits, and additional mills not to exceed 2.5 for capital expenditure from current revenue.[15]

Referring to the TRS, The Annual Report of the Department reported another basis of distributing TRS funds:

> . . . All calculations used in arriving at the qualifying rate were based on the total assessment as of December 31, 1953. . . .
>
> Any district or division that was unable or did not wish to qualify for the subsidy was paid a grant equal to 30 per cent of any increase not exceeding 5 mills in the 1955 basic requisition rate over the 1954 basic rate. However, no limitation was placed on the overall mill rate increase in order to qualify for this grant.[16]

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[15] Government of the Province of Alberta, Grant Regulations (Orders in Council No. 434/55, 774/55, 1122/55, and 529/56) Effective April 1, 1956.

[16] Department of Education, Annual Report, (Edmonton, Queen's Printer, 1955), p. 104.

The purpose of the TRS seems to be revealed in the key phrases:

1. . . . "to compensate for (deliberate) loss of revenue from local sources."[17]
2. . . . "to enable school boards to reduce the present heavy burden of educational costs . . ."[18]

II. THE PROCEDURE TO QUALIFY FOR THE SUBSIDY

Budgeting. The first step consisted of preparing an estimated budget for the school year ending July 31, 1955. Using the actual expenditures of 1954 as a guide and at the same time keeping in mind that the mill rate must not be higher than 25 mills, the superintendents and secretary-treasurers prepared the budgets for the school boards' approval. The Department of Education then analyzed the budget and either accepted it or returned it for revision.

Application. The application form[19] associated with the TRS showed clearly the entries required once the 1954 capital expenditure out of current revenue and the operational deficit for 1954 (excluding that part of the deficit which was attributed to capital expenditure) were calculated. The statement of the detailed analysis of the deficit and the application were both forwarded to the department for approval.

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[17] Edmonton Journal, op. cit.

[18] Ibid.

[19] Appendix II.

Calculations. The main variables involved in the calculation of the TRS are taken from the claim form[20] and are as follows:

1. Requisition Mill Rate, 1954. This rate had a direct bearing on the subsidy. For instance, if a district levied 32 mills for education in 1954 and if it budgeted for 25 mills in 1955, the difference of 7 mills was significant for grant purposes in that this mill rate (exclusive of variables "F" and "H") was levied on the 1954 assessment in order to calculate the TRS grant.

2. Mill Rate Excluding Capital Expenditures Out of Current Revenue. If no provision is made for capital expenditures through special tax levies, debentures, or other loans, then these expenditures are referred to as capital expenditures out of current revenue. To calculate variable "F" it was first necessary to find the number of mills applicable to capital expenditure out of current revenue and then deduct this mill rate (or 2.5 whichever was the lesser) from the requisition mill rate, 1954. For instance, if in the example under "D" the mill rate applicable to capital expenditure out of current revenue--capital expenditure out of current revenue divided by total assessment December 31, 1953 times 1000--was 2.2 mills then the effective rate for TRS grant (exclusive of variable "H") would have been 32 mills less 2.2 mills (2.2 or 2.5 whichever was the lesser) less 25 mills. A capital expenditure out of current revenue equivalent to zero mills would, therefore, give the

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[20] Appendix II.

maximum benefit from this variable.

3. Number of Mills Applicable to Deficit. A deficit often occurs when anticipated expenditures are underestimated. To calculate variable "H" it was first necessary to determine how much of the deficit was attributable to capital expenditure. This aspect of the calculation had to be shown on the "Analysis of Deficit" form.[21] The difference between the total deficit and the part of the deficit attributable to capital expenditure was converted to mills based on the total assessment December 31, 1953. This mill rate became variable "H". If, in the example given, the number of mills applicable to the deficit was four then the effective rate for TRS grant would have been 32 less 2.2 plus 4 less 25. The largest deficit with no part of the deficit attributable to capital expenditure would, therefore, give the maximum benefit from this variable.

4. Assessments. The assessment, December 31, 1953, formed the basis for calculating the total mill rate attributed to capital expenditure out of 1954 current revenue and to net deficit for same year. This mill rate applied to assessment, December 31, 1954, formed the basis for calculation of the TRS.

The following comparison illustrates the calculations as well as the effect of the two variables--deficits and capital expenditure out of current revenue. The effects of the other two variables upon calculation are more easily understood and are therefore kept constant in

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[21] Appendix II.

the illustration.

		Division A	Division B
(a)	Total Assessment, Dec. 31, 1953	$10,000,000	$10,000,000
(b)	Capital Expenditure out of Current Revenue, 1954	25,000	1,000
(c)	Number of Mills Applicable to Capital Expenditure out of Current Revenue, 1954	2.5	.1
(d)	Requisition Mill Rate, 1954	30	30
(e)	(c) or 2.5 mills, whichever is the lesser	2.5	.1
(f)	Mill Rate Excluding Capital Expenditure out of Current Revenue	27.5	29.9
(g)	Total Amount of Operational Deficit for 1954	———	26,000
(h)	Number of Mills Applicable to Deficit	nil	2.6
(i)	Qualifying Mill Rate	27.5	32.5
(j)	Number of Mills for Tax Reduction Subsidy	2.5	7.5
(k)	Total Assessment, Dec. 31, 1954	$10,000,000	$10,000,000
(l)	Total Amount of Tax Reduction Subsidy	$25,000	$75,000

The above illustration shows how the two variables--Mill Rate Expenditure out of Current Revenue and Number of Mills Applicable to Deficit--can affect the amount of grant earned from the TRS.

III. SUMMARY

Apart from the warning given by Hanson of the University of Alberta against the principle of any form of tax reduction subsidy, there seemed to be very little literature on subsidies of this kind. During the legislation of the scheme the main opposition appeared to come from

outside the legislature. The budget speeches implied that the government sensed a need for some direct action to lessen the burden of educational costs on the local property owners. It was hoped that the TRS would achieve what appeared to some an impossibility, the decreasing and stabilizing of educational costs.

Once the TRS came into effect two steps were necessary in order to qualify: first, budgeting for the 1954-1955 term and secondly, preparing the application. The application along with the budget had to be accepted by the department before payment of the TRS was approved.

CHAPTER III

EVALUATION CRITERIA DEVELOPED

Johns and Morphet indicated that grants are of tremendous importance to the financing of education and are a good example of the sharing of the cost of an essential service. They also pointed out that this sharing of the cost of a service is a good example of how such a service can be provided by a type of partnership between and among different levels of government. However they stated that:

> . . . These partnerships have necessitated the development of arrangements by which different levels of government could participate in the financing of a service and at the same time provide for an efficient administration of the service.[1]

This seems to suggest a need for criteria by which to first examine the effect of the TRS on administrative practices and secondly criteria by which to examine the effect of TRS on the fiscal partnership between the provincial and the local governments in sharing the cost of education.

I. ADMINISTRATIVE CRITERIA

The literature on school finance does not seem to earmark any specific criteria pertaining to the actual administration of grants. However there are some criteria or characteristics which seem to be desirable.

Simplicity. "Simplicity is another universal principle," stated

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[1] Roe L. Johns and Edgar L. Morphet, Financing the Public Schools (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1960), p. 111.

Mort, Reusser and Polley.[2] This suggests that a grant formula should be easily understood. It should be understandable in that the application of the formula or the interpretation of it should not lead to unnecessary bickering.

Economic. Most people would probably agree that the cost of administering a grant formula should be as small as possible. A grant system which abuses this principle "might encourage extravagance."[3] What Mort, Reusser and Polley said about taxes in general might well apply to grants since the latter depends upon some form of tax revenue. They had this to say about tax economy.

> Economy refers to the costs of the administration of the tax. Some taxes cause more bookkeeping than others and are more difficult to enforce. When this is the case, costs rise and the principle of economy is lost. Some taxes must be levied and enforced in order to strengthen the tax system. . . .[4]

Where the word "tax" or "taxes" occur in the above quotation one might insert "grant system" or "grant systems."

Objectivity. An objective formula is definite in its application and tends to avoid flexibility of interpretation and application. As in the case of simplicity in grant formula objectivity too avoids bickering over interpretation. Subjectiveness in grant formula leads to possible unfairness and to the undesirable practice of relinquishing to pressure

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[2] Paul R. Mort, Walter C. Reusser, and John W. Polley, Public School Finance (New York: McGraw-Hill, 1960), p. 176.

[3] Johns and Morphet, op. cit., p. 295.

[4] Mort, Reusser and Polley, op. cit.

groups. Common sense seems to tell one to avoid possible loopholes in the interpretation of grant schemes. One group of authors seemed to imply this when they said, "Certainty is closely related to simplicity."[5]

Autonomy. Considerable concern has been expressed over the possible effects of grant formula on local autonomy. Johns and Morphet objected to any grant system which interferred with it:

> It should be clearly understood by state as well as local school officials that procedures established for determining foundation program costs are to be used only for that purpose and are not to be used to restrict or regulate local expenditures. For example, it would be a serious mistake to require any district to use only for transportation any funds included in the foundation program on the basis of transportation need, because such a requirement would restrict the decision making prerogative of the board and might encourage extravagance. It would be equally unfortunate to have a similar provision involving funds for current expense other than instructional salaries and transportation.[6]

Similarly the same authors stated that the foundation program "should not be used as a basis for restricting or denying local control of education."[7] The Research Division of the National Education Association showed concern over local autonomy when it defended the foundation program concept because it was "consistent with the preservation of autonomy in local government."[8] Local autonomy over budgeting seemed important to Johns and Morphet because

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[5] Ibid.

[6] Johns and Morphet, op. cit., pp. 294-295.

[7] Ibid., p. 292.

[8] Research Division of the National Education Association, "Statutory Bases of State Foundation Programs for Schools," Journal of National Education Association, (April, 1948), pp. 45-53.

they stated that "the board should be given the final authority to approve the budget."[9]

II. CRITERIA OF DISTRIBUTION FROM THE FOUNDATION PROGRAM CONCEPT

Much of the literature on school finance emphasizes that grants should equalize opportunity by establishing a basic minimum program. In addition, the literature points out that a grants system should equalize costs and aid. One plan which has been recommended by many writers because it is capable of distributing aid in a way that adheres to these principles is the foundation program concept. This section aims to define the scheme and apply it to Alberta conditions to see if it works. If it works, the criteria for distributing grants can be formulated from the plan.

However, the success of a foundation program plan is dependent upon certain conditions. First, the program should embrace a major portion or all of the school expenditures. Secondly, the administrative units should be large enough to provide first-rate, modern educational facilities and services. Thirdly, the whole province should be under the scheme. Fourthly, assessments should be equalized. "Until assessments," stated Dr. M.E. LaZerte, "are equalized the costs of education borne by real property cannot be fairly distributed."[10] With respect to assessments he made these additional observations:

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[9] Johns and Morphet, op. cit., p. 408.

[10] LaZerte, op. cit., p. 215.

> Municipal policies should be definite and fair in so far as future exemptions are concerned, because with municipalities becoming more dependent upon the province for grants, all municipalities are affected by the assessments and taxation policies of other municipalities.[11]

Fifthly, the plan would necessarily have to be recalculated periodically as the unit costs increase or decrease. Sixthly, it may be necessary to exercise some control over the number of financially inadequate districts because equalization tends to encourage fragmentation into smaller school systems. Lastly, the plan must not restrict a district to the basic program.

The Concept

Concern about equality has led to studies of (1) ability to support schools; (2) educational need; (3) standards of local effort exerted in support of education; and (4) standards of adequacy of the educational program. These terms have been useful in the development of the foundation program concept for allocating the costs of education among several revenue sources.

Definition. Primarily the foundation program concept is a system of establishing a fiscal partnership between the local school system and the central government. The foundation program is presented in the literature as the means for insuring an equitable distribution of the costs and an equitable distribution of the benefits of the total tax burden supporting education. The Research Division of the National

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[11] Ibid.

Education Association said:

> The initial and still most important value of the foundation program pattern has been and will continue to be the achievement of reasonable equalization of educational opportunity and of the burden of supporting an accepted program expressed in terms of cost.[12]

Thus, it seems that the purpose of the foundation program concept is to spell out a method of sharing the cost of a basic program in a manner that requires a local effort commensurate with the earning power of taxable property.

Sharing the costs. Reeves[13] stated that the extent of the basic program has to be decided objectively, a valid measure of need has to be found; the relative ability of the local district to pay has to be computed scientifically. He also pointed out that once these measures have been decided, they become the basis of determining the provincial and local share of the costs.

Consequently, if the cost of the basic program could be represented by \$x per unit of need for every district and ability represented by \$y per unit of need for every district, then the local share of the \$x should be a fixed proportion of \$y. This proportion may be represented by z mills. Therefore, the local share per unit of need would be \$(z/1000 times y) and the provincial share per unit would be \$(x minus zy/1000).

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[12] Research Division of the National Education Association, op. cit., p. 45.

[13] Reeves, op. cit., p. 14.

The basic program has been expressed as so many dollars per pupil, per classroom, per teacher or per capita. The first three, with variations, have been widely recognized. They are easily understood and reasonably objective.

In the early period of American education the ability to pay was simply defined as the amount of wealth in a district. The areas of low ability received the same consideration regardless of the number of units of need. Since about 1924 the trend toward the establishment of minimum programs with their accompanying emphasis on equalization caused educators and governments to look for a better definition of the ability to support a basic program in education. Accordingly the foundation program concept generally defines ability as assessment per unit of need or, as gross or net income per unit of need.

The local rate of contribution is a critical point. It aims to equalize costs by having all districts pay in accordance with their ability. By the foundation program concept the local effort or rate of contribution is often expressed as a uniform mill rate--sometimes referred to as the qualifying mill rate in order to participate in the distribution of aid.

Applying the Plan to Alberta

A measure of need for the Alberta plan. The "pupil" as a measure of need is an old but popular yardstick. It encourages economy and promotes the establishment of large attendance areas. However, it would tend to be more acceptable in densely populated areas where the pupil-teacher ratio would be more apt to remain fairly constant. Also, it could tend

to foster the undesirable instructional practice of over-crowding classrooms. Reeves and Mowat[14] warned that the pupil measure would discriminate against the sparsely populated area where the expense of operating a classroom with a small enrolment might be as great or greater than the classroom with a larger enrolment. For example, there seems to be some evidence that as long as there is a shortage of teachers, a special allowance may be necessary to entice qualified teachers to teach in some of the fringe areas. The divisions and counties of Alberta have some sparsely populated areas; consequently, it was decided to look for a more suitable measure of need.

The teacher measure would be fairer to the sparsely populated areas, but local policy with respect to hiring of teachers tends to vary considerably. For instance, divisions and counties may vary in their policies of hiring principals, vice-principals, supervisors and other non-teaching personnel. Indeed, it is a well known fact that pupil-teacher ratios vary considerably within each district.

Mort and Reusser[15] seemed to favor the "weighted" classroom as a measure of need for small samples of rural areas. Thus it was assumed that the actual operating classrooms as listed in the annual reports of the Department of Education would be a reasonably valid measure of need.

A measure of ability for the Alberta plan. In Alberta the property tax has been the main source of revenue for educational costs. Since the property tax was levied on assessed values of the taxable property, a suitable measure of ability would be the assessment per

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[14] A. W. Reeves and G. L. Mowat, "How Shall the Money be Distributed," The Alberta School Trustee (March, 1958), p. 9.

[15] Paul R. Mort and Walter C. Reusser, Public School Finance (New York: McGraw-Hill Book Co., 1951), p. 506.

classroom.

Appendix III shows a comparison of two measures of ability for Alberta's divisions and counties--assessment per classroom and assessment per pupil in average daily attendance. The rank-order correlation of .93 between the two measures would seem to justify the use of either measure of ability and further justify the use of the classroom as a measure of need.

The cost of the basic program. "This may be done," wrote Reeves and Mowat,[16] "by referring to average practice, and the measurement may be expressed in terms such as cost per capita, per pupil . . ." The Research Division of the National Education Association would seem to agree to this. When referring to the foundation program the Association said:

> It should nevertheless be as good a program as the people of the state as a whole are willing and able to support from combined revenues of the state and local governments.[17]

A simple procedure for calculating the average cost per classroom is to divide the total expenditure by the total number of classrooms. Two plans are illustrated. The first plan gives the average expenditure per classroom on all expenditures listed in Table 27 (b) of the Annual Report[18]

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[16] Reeves and Mowat, op. cit.

[17] Research Division of the National Education Association, op. cit., p. 86.

[18] Department of Education, Annual Report 1956.

exclusive of surpluses and deficits. The second plan gives the average expenditure on instruction.

Plan I.......	Total expenditure	$30,631,912.91*
	Total classrooms	4176
	Average cost per classroom (approx.)	$7,335.00
Plan II......	Total cost of instruction	$15,527,422.54
	Total classrooms	4176
	Average cost per classroom (approx.)	$3,710.00

Hence, the basic program including a major portion of the expenditures would be $7,335 per classroom for the divisions and counties of Alberta or $3,710 per classroom for instruction.

Calculation of the qualifying mill rate. The rate for Plan I is calculated as follows: (to the nearest $)

Total cost of the program ...4,176 x $7,335 =		$30,630,960.00*
Aid as per Sections 1-4	$13,426,483	
TRS	3,272,783	
Total aid		16,699,266.00
Amount to be raised locally		$13,931,694.00

$$\text{Qualifying mill rate} \quad \frac{13,931,694 \times 1000}{547,363,427} = 25.4$$

In Plan II the rate is calculated on the basis that the TRS was the only aid for instructional purposes.

Total cost of instruction... 4,176 x 3,710 =	$15,492,960.00
Total aid (TRS)	3,272,783.00
Amount to be raised locally	$12,220,177.00

$$\text{Qualifying mill rate} \quad \frac{12,220,177 \times 1000}{547,363,427} = 22.3 \text{ mills.}$$

*The discrepancy in these figures is due to the fact that the average cost of $7,335 is only an approximate figure.

The above procedure differs slightly from the "Small Fund Plan"[19] which calls for a local rate of contribution that shall be no higher than that needed to support the foundation program in the wealthiest district. If this method were to be used to arrive at a uniform local mill rate, then, from the Alberta sample, Clover Bar would have to be used as this district. With an assessment of $579,552 per classroom, the basic instructional program would require a qualifying rate of 6.4 mills instead of 22.3. The difference between these two rates would cost the Alberta government a high price for a portion of the educational costs. From this standpoint the procedure outlined in Plan I or Plan II is more feasible.

Sharing the cost. Plan I is used to illustrate the application of the foundation program concept as a system of distributing aid to the divisions and counties of Alberta using actual costs and grants based on the school operations for the term 1954-1955. Table I shows the distribution of aid and the local effort required by each district to put the plan into effect. In addition, the rank order of aid and ability are shown in columns (5) and (6), respectively. From these columns it can be readily seen that there is perfect correlation between ability and aid under the foundation program scheme.

In Table I the County of Grande Prairie would be required to make a local effort of 25/1000 x 105,613 or 2,640 dollars per classroom. Government aid would be the difference between the cost of the basic program and

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[19] Reeves, *op. cit.*, p. 99.

TABLE I

THE FOUNDATION PROGRAM PLAN FOR SHARING THE COST OF A BASIC EDUCATIONAL PROGRAM OF $7,335 PER CLASSROOM IN ALBERTA

Division or County (1)	Assessment per Classroom (2)	Local Effort per Classroom at 25 Mills (3)	Provincial Aid per Classroom (4)	Rank Order of Ability (5)	Rank Order of Aid (6)
Grande Prairie	105,613	2,640	4,695	35	35
Vulcan	233,567	5,839	1,496	6	6
Ponoka	128,010	3,200	4,135	28	28
Newell	57,939	1,448	5,887	55	55
Warner	149,324	3,733	3,602	18	18
Stettler	188,333	4,708	2,627	9	9
Thorhild	146,467	3,662	3,673	19	19
Berry Creek	163,643	4,091	3,244	12	12
St. Mary's R.	104,225	2,605	4,730	36	36
Foremost	146,059	3,651	3,684	21	21
Medicine Hat	89,273	2,232	5,103	43	43
Taber	111,802	2,795	4,540	33	33
Lethbridge	96,336	2.408	4,927	39	39
Acadia	103,674	2,592	4,743	37	37
Sullivan Lake	91,063	2,277	5,058	42	42
Peace River	87,105	2,178	5.157	44	44
Lac Ste. Anne	77,139	1,928	5,407	47	47
Edson	69,232	1,731	5,604	50	50
Clover Bar	578,552	14,464	-7,129*	1	1
Rocky Mtn. House	58,338	1,458	5,877	54	54
Neutral Hills	129,115	3,228	4,107	27	27
Holden	119,010	2,975	4,360	30	30
Lamont	134,667	3,367	3,968	25	25
Vegreville	157,700	3,943	3,392	14	14
Camrose	149,648	3,741	3,594	17	17
Two Hills	112,506	2,813	4,522	31	31
Killam	154,690	3,867	3,468	16	16
Stony Plain	106,240	2,656	4,679	34	34
Sturgeon	133,378	3,334	4,001	26	26
Vermilion	156,500	3,913	3,422	15	15

TABLE I (continued)

Division or County (1)	Assessment per Classroom (2)	Local Effort per Classroom at 25 Mills (3)	Provincial Aid per Classroom (4)	Rank Order of Ability (5)	Rank Order of Aid (6)
Castor	135,471	3,387	3,948	24	24
Macleod	247,419	6,185	1,150	4	4
Pincher Creek	160,350	4,009	3,326	13	13
Drumheller	234,000	5,850	1,485	5	5
Olds	175,051	4,376	2,959	10	10
Wainwright	146,273	3,657	3,678	20	20
Provost	167,723	4,193	3,142	11	11
Red Deer	100,275	2,507	4,828	38	38
Wetaskiwin	120,123	3,003	4,332	29	29
Westlock	92,165	2,304	5,031	41	41
Foothills	310,650	7,766	- 431*	2	2
Smoky Lake	79,905	1,998	5,337	45	45
Wheatland	213,262	5,332	2,003	7	7
Calgary	248,250	6,206	1,129	3	3
Athabasca	67,933	1,698	5,637	51	51
St. Paul	62,575	1,564	5,771	53	53
Bonnyville	49,484	1,237	6,098	56	56
Spirit River	76,583	1,915	5,420	48	48
High Prairie	72,379	1,809	5,526	49	49
Strawberry	143,398	3,585	3,750	23	23
Fairview	95,592	2,390	4,945	40	40
Lac La Biche	30,429	761	6,574	58	58
Ft. Vermilion	16,778	419	6,916	59	59
East Smoky	40,842	1,021	6,314	57	57
Red Deer Valley	77,786	1,945	5,390	46	46
Lacombe	145,250	3,361	3,704	22	22
Coal Branch	112,100	2,803	4,532	32	32
Barrhead	67,757	1,694	5,641	52	52
Three Hills	195,829	4,896	2,439	8	8

*Excess income.

Source: Column (2) Appendix III.
Columns (3), (4), (5) and (6) calculated.

the amount raised locally, that is, $7,335 less $2,640 or $4,695. In comparison to the rest of the divisions and counties Grande Prairie would therefore rank 35 in both aid and ability.

The plan would satisfy all the criteria listed earlier in this chapter.

The Foundation Program Criteria

The three basic criteria to be used to analyze principles of distribution of the TRS are as follows:

1. The rate of 25 (nearest mill) mills established under Plan I will be used to analyze the effectiveness of the TRS in establishing a qualifying rate. Incidentally, the "qualifying" mill rate of the TRS scheme was also 25 mills.

2. The way in which the foundation program concept distributes aid gives a perfect correlation between rank order of aid per classroom and rank order of assessment per classroom as defined. (See p. 15.) Thus a correlation of one between these measures will be the criterion by which to analyze the equitableness of the TRS method of distributing aid.

3. The basic instructional program of $3,710 per classroom as per Plan II will be used as the criterion to examine the effectiveness of the TRS in achieving a "foundation program" or basic level of opportunity instead of total expenditures as per Plan I for two reasons. Firstly, it was considered that instructional costs are more closely related to the quality of education offered and for the purpose of this examination might better represent a basic program. Secondly, since TRS represents only a portion of the government aid, it seems fair but not necessarily valid to use only a portion of the total cost.

CHAPTER IV

AN EXAMINATION OF THE EFFECT OF TRS ON ADMINISTRATION AND PRACTICE

Those who were instrumental in developing the TRS formula would probably agree that there were real problems connected with the administration of this grant. The problems began with the secretaries and the superintendents who passed them on to the Department of Education when the solution became too difficult. That some unexpected problems would occur seemed inevitable to some members of the cabinet. Hinman, Minister of Municipal Affairs, stated, "The application of the tax reduction subsidy for educational purposes during 1955 will undoubtedly pose some unanticipated problems."[1] An editorial in Alberta's official trustees' magazine suggests that the minister was correct in his prediction. The editorial referred to the TRS as follows:

> The new tax reduction subsidy introduced this year in the school grants regulations is causing some concern and not a little confusion. Districts are endeavoring to qualify for the subsidy by reducing the mill rate to 25 by different methods which it is hoped will meet with the approval of the Department of Education. This procedure is necessary in order that total revenues shall not be decreased too much. Tax reduction subsidies sound all right in theory, but when put into practice they seem to be subject to some criticism.[2]

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[1] Budget Report Forms - On file at the Department of Education.

[2] A.G. Andrews (ed.), "Comments and Criticism," The Alberta School Trustee, (April, 1955), p. 3.

I. LOCAL BOARD PROBLEMS

Budgeting

The budget files[3] revealed that almost from the outset boards experienced difficulties with their respective budgets. Many districts were unable to present a balanced budget; other districts had to revise their budgets numerous times in order to qualify for the subsidy. From reading the comments made by school boards on their budgets one gained the impression that some school boards were desperate. They were desperate because they were caught in a squeeze between the necessity of lowering the mill rate to qualify for the TRS and the necessity of meeting rising costs. Here are some of the comments made by school boards and they are indicative of some of the problems faced by local boards.

One school board gave the following reasons for increasing its budget-expenditures:

> 1. Teachers' Salaries: Reason being that the 1954-55 schedule was in effect only for four months of 1954. Some salary will apply for the whole year of 1955 and annual increments will be added to it. $8000.00 was provided just in case the board will have to increase the schedule for 1955-56.
>
> 2. Supplies and Equipment: These were kept at a minimum for the last few years especially for equipment. The board would like to provide more such equipment as new maps, globes, laboratory equipment etc.
>
> 3. Repairs to Buildings: Very little renovation was done in previous years. Some of the older schools in central points need renovation.
>
> 4. Insurance: The blanket policy is expiring in July, 1955.

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[3] Budget Report Forms, *op. cit.*

> 5. Transportation: Last September five new buses were added and were paid only for 4 months of 1954. This year those buses will be paid for 12 months. Provision was made for another three buses.
>
> 6. Health Services: All pupils were vaccinated and innoculated during the latter part of 1954 and early in 1955. Payment will be made for the service this year.[4]

There was considerable correspondence between the Department of Education and the local boards. A letter attached to the budget of one district was dated April 28, 1955, and directed to the attention of Mr. Pike, a superintendent who was called in to help process the claims for the subsidy. The letter stated:

> Further to your telephone conversation of April 27th, wherein you advised a number of changes in our Budget for the year 1955; I desire to inform you that the Board has instructed me to make the following corrections:
>
> The TRS, as requested by you, amounts to . . . . . . It is pointed out that our Budget has been reduced by .16 mills or $1,735.37 in order to arrive at a balance and the reductions have been made in the following expenditures:
>
> Repairs have been reduced to $54,203.63, capital expenditure has been reduced to $30,000.00 and the Teachers' Retirement Fund has been reduced to $1,860.00, thus giving a total revenue of $785,473.42, and an expenditure of the same amount.[5]

Sometimes a balanced budget produced other problems for the local boards. One board boasted of its budget in this manner:

> This is an "ECONOMY" Budget. A Finance Committee has been appointed to keep close watch on Expenditures. Revenue and Expenditures will be closely scrutinized each month.[6]

This same board made reference to over-expenditures in a repair program--

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[4] *Ibid.*

[5] *Ibid.*

[6] *Ibid.*

an "extensive" repair program. The comments also implied that some of this repair program included the establishment of classrooms in the basement of one of its schools to take care of increased enrollments.

One board seemed to postpone its financial problems by budgeting for a deficit in order to qualify for the TRS. It stated:

> The Board felt it was necessary to qualify for the TRS to bring the mill rate down in this area, therefore they have budgeted for an operational deficit of approximately $5000.00. The mill rate is still 40 mills on the hamlets and they consider this sufficiently high.[7]

Another board indicated its desire to qualify for the TRS and at the same time its desire to provide better facilities by carrying out a major repair program. It commented as follows:

> It will be noticed from the completed Budget this year that the Board intends to endeavor to provide a complete program and to decrease expenditures from $777,631.53 in the year 1954 to $760,208.79 in 1955.
>
> The Division has a necessary major repair program this year and feels that this work must be done in order to provide better facilities both for students and teachers.
>
> Although the requisition to the local taxing authorities could have included a further 2.5 mills in accordance with your instructions for Capital Expenditure this year, the Board is desirous of holding the mill rate at 25 mills and so actually levy 22.5 mills for operational expenses and 2.5 mills for capital.[8]

Application for the TRS Grant

After completing the budget, local boards made a formal application for the subsidy. This consisted of two parts, namely: the analysis of the deficit and the actual claim form.

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[7] Ibid.

[8] Ibid.

Analysis of the deficit. Before the actual claim form could be completed, each board had to analyze its 1954 deficit if it had one. The 1954 financial statement provided the figures for capital expenditure out of current revenue and the total deficit for 1954. If the portion of the deficit attributable to over-expenditure for capital out of current revenue satisfied the department, the remaining procedure caused no problems. For example, supposing the following figures were accepted, the calculations and figures were shown as follows:

Total deficit for 1954	$12,357.78
Amount of this deficit attributable to over-expenditure for capital out of current revenue	4,595.53
The amount to be entered in Section (g) of the claim	$7,762.25

However, the "Analysis of 1954 Deficit" seemed to be a major problem for the local boards. Many boards who tried to analyze their deficits at the local level had to turn to their auditors or to departmental officials for help. The analyses which were completed were usually revised for various reasons. A memo from the Assistant Field Administrative Officer to the Deputy Minister suggested a reason for one revision:

> As a result of our discovery that accrued teachers' salaries were contributing largely to the deficit in this division, we are submitting a revised claim for TRS to the Minister for his approval.[9]

The file[10] shows that many boards did not determine how much of their 1954 deficit was attributed to capital expenditure. The portion of the

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[9] *Ibid.*

[10] *Ibid.*

TRS claim, Analysis of the 1954 Deficit,[11] in the majority of cases was incomplete. The claims also showed that the figures in this portion had been revised by departmental officials in some instances. This suggests that boards experienced difficulties in persuading the Department that certain expenditures contributed to the deficit apart from capital expenditure. Reasons were given but they were not always related to capital expenditure. One division listed these reasons:

> The main factors contributing to the 1955(4) deficit were:

(1)	1953 deficit carried forward	$24,000
(2)	Increased teaching staff and salaries	20,000
(3)	Increased busses	25,000 [12]

Table II shows how the expenditures changed from 1954 to 1955 and in addition it seems to substantiate the evidence given in this section of the study as to the problems created by the analyses of the deficits. Capital expenditure out of current revenue decreased by 46.3 per cent from 1954 to 1955. From 1953 to 1954 capital expenditure out of current revenue had increased. On the other hand, the deficits increased by 54 per cent from 1954 to 1955. Between 1953 and 1954, however, deficits increased by a similar ratio. Deficits decreased again between 1955 and 1956. Surpluses decreased from 1953 to 1954, increased from 1954 to 1955 and decreased again from 1955 to 1956. Thus Table II shows some relatively decisive changes in policy--especially with respect to (1) financing capital expenditure out of current revenue, (2) deficit financing, and

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[11] Appendix II.

[12] Budget Report Forms, op. cit.

TABLE II

1955 EXPENDITURES COMPARED WITH 1954 EXPENDITURES

(1)	1955 Total Expenditures (2)	1954 Total Expenditures (3)	Difference in Expenditures Col.(2) - Col.(3) (4)	Rate of Change Diff./ 1954 Exp. (5)
Administration	$725,150.58	$648,018.18	$77,132.40	.119
Teachers' Salaries	14,522,253.95	13,154,845.94	1,367,408.01	.103
Other Instruction	1,005,168.59	891,372.50	113,796.09	.127
Plant Operation and Maintenance	3,874,208.31	3,460,595.94	413,612.37	.119
Transportation	5,793,586.75	5,159,335.17	634,251.58	.122
Auxiliary	230,837.33	261,295.84	-30,458.51	-.116
Expenditures to other Boards	291,500.62	305,736.47	-14,235.85	-.046
Capital from Current Revenue	1,522,666.78	2,838,884.08	-1,316,217.30	-.463
Debt Charges	2,414,679.84	1,776,093.08	638,586.76	.359
All Other Expenditures	251,860.16	372,041.79	-120,181.63	-.323
Deficit from Previous Year	176,842.87	114,829.64	62,013.23	.540
Surplus for Year	888,221.95	709,971.16	178,250.79	.251
Grand Total	31,696,977.73	29,693,019.79	2,003,957.94	.067

Sources for Data: Columns 1, 2, and 3 -- Annual Report, 1956.
Columns 4 and 5 calculated.

(3) surpluses. These changes tend to support the claim that the analysis of the deficit created difficulties for local boards as well as for the Department.

It was difficult to find in the deficit analyses, in every case, positive proof of the portion of the deficit attributed to capital expenditure out of current revenue.

The claim form. The claims for the TRS grant were made on a special form.[13] The claims generally showed signs of confusion and trouble. Some forms showed that the figures entered in the blank spaces had been changed in many instances. Other forms showed no figures entered in the blank spaces. Since some of the budgets did not have a claim form attached, it may be assumed that boards involved could not cope with the problem.

The TRS and Local Autonomy

There were some signs to indicate that the TRS scheme interfered with the power of local authorities to plan the kind of education which they wished to provide for the children under their trusteeship. The following evidence is offered as indications that through the TRS scheme the central authorities trespassed upon the age old principle of local jurisdiction over educational expenditures and the power to levy taxes to meet those expenditures.

1. The TRS scheme did not give boards much opportunity to make

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[13] Appendix II.

long range plans whereby they might put their finances in order. The boards had to meet the conditions to qualify on short notice and common sense would tell one that this would tend to take financial control out of the hands of the local authorities and transfer it to the central authority. Also, the urge to qualify in a hurry would tend to add to the many problems facing local boards at that time.

2. The comments in the budgets indicate that there was considerable interference with the preparation of local budgets. The documentary evidence under "Budgeting" shows that the TRS scheme interfered with normal budgeting practices indirectly and probably unintentionally.

3. Memos attached to the claim forms and notations made on the claim forms show signs of increased central control. In a memo from the Assistant Field Administrative Officer to the Minister the TRS was discussed as follows:

> Re: Tax Reduction Subsidy . . .
>
> You may recall that on May 11th you were visited by........ in connection with the inability of the County to qualify for Tax Reduction Subsidy if we apply the rules governed by our present procedures.
>
> Major factors contributing to the County's difficulties are: . . .
>
> In view of these factors, we feel the best solution to the problem is to recommend for your approval, an arbitrarily set qualifying rate of 29.5 mills, an increase of 1.17 mills over the 28.33. This arbitrary rate of 29.5 mills will produce a Tax Reduction Subsidy in the amount of $50,850.20, and permit the balancing of a carefully prepared Budget. It might be added that this proposal makes unnecessary any use of the Contingency Fund.[14]

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[14] Budget Report Forms, op. cit.

Often terms such as "with the approval of the Minister" or "in consultation with the Minister" appeared on the claims. Under Section B of the claim form for one county the comment "arrived at arbitrarily after consulting (the) Minister in the company of a delegation" indicates centralization of control and additional expense. Other terms such as "recommend for your approval" and "advise" were common.[15]

One board expressed its concern over the scheme because it could not qualify for the original plan of distribution. It received TRS grant according to the secondary plan of distribution outlined on pages 23 and 24 of this thesis. This board's comments once again point out the increased interference in local educational affairs which the TRS scheme seemed to promote. The comments on page 4 of the budget were:

> The overall increase of three mills above last year is to cover increase in cost of operation, deficit incurred due to cut in school bus grant, and retroactive increase in teachers' salaries.
>
> We have been advised by the Minister that we would receive 30% of the increase in the form of a grant under substitute note 1. We have determined this grant as follows . . .
>
> The Board is much opposed to the increase in mill rate in this Division when other districts are decreasing their mill rate. However after discussion with the Minister no other solution was evident.[16]

It is quite obvious that the TRS scheme did affect local autonomy. However, it is not the purpose of this study to state whether this is good or bad but simply to conclude that an important principle had been involved.

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[15] *Ibid.*

[16] *Ibid.*

II. DEPARTMENTAL PROBLEMS

The Department of Education had its problems with the TRS too. Often it seems the Minister and the Assistant Field Administrative Officer had to make some difficult decisions. Evidence presented under "Local Problems" bears this out. One real problem for the Department centered around the question of what to do with unbalanced and incompleted budgets, and incorrect and unfinished claim forms (including deficit analyses). Though these have been cited as problem areas for local boards, there was a difference. The Department was responsible for the correctness of the claims sent in by the local boards. The revised budget figures, the changes in the claim figures, the correspondence by mail, telephone and personal interview,[17] and the delegations who trekked to Edmonton to see the Minister[18] signify that the Department had its troubles with the TRS scheme. The scheme saddled the Minister of Education and his staff with what seems to have been a colossal task and a distasteful responsibility. One board member who attended a "School" in Red Deer, Alberta, early in spring of 1955 on the TRS scheme declared that even the assistants from the Department "gave up trying to figure it out."

These comments directed to the Department by two claimants for the subsidy are examples of the types of problems that the Department had to decipher in order to ascertain whether or not the claims were in accordance to the formula as originally planned. One claimant proclaimed:

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[17] Budget Report Forms, op. cit.

[18] Ibid. (Memos attached).

> This deficit is so small that it is difficult to attribute it to either capital expenditures out of current revenue or operational expenses, when you compare the magnitude of the deficit with the amounts by which certain expenditures differ from the budget estimates. For example capital expenditures to be provided out of current revenue were estimated in the 1954 budget as $1500 and the amount spent was $7,261.60. However some of the operational expenditures were considerably in excess of the estimates, for example, the following three figures are the amounts by which the budget was exceeded:

Transportation and maintenance of pupils	$2790.57
Teachers' and Supervisors' Salaries	4439.82
Repairs and Replacements to Buildings	6055.77

> We budgeted for $242,000 and our revenue actually was $260,721.04
>
> Our revenue was over $18,000 greater than estimated and both our capital expenditure out of current revenue and several operational expenses were considerably higher than the estimates, so it is difficult to say that one or the other resulted in the tiny deficit.[19]

The above quotation followed these instructions given at the foot of the claim form:

> Set forth on the reverse a detailed analysis of the reasons for the above deficit, being specific as to the extent it is attributable to over-expenditure for capital purposes from current revenue.[20]

Similarly, the following reasons were given by the second claimant:

> The over-expenditure for capital purposes from current revenue was due mainly to the purchasing and equipping of teacherages in order to accommodate more teachers who required teacherages. The electrification of some teacherages was also partly responsible for the over-expenditure, also the purchase of a large quantity of auditorium chairs and playground equipment.
>
> The main other over-expenditures were in teachers' salaries and van drivers who were given increases after the budget estimates were prepared. Debenture payments to the . . . Division No. . . . were not taken into consideration. The main other expenditures above the estimates occurred in repairs to furniture and equipment, school supplies and textbooks.[21]

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[19] *Ibid*.

[20] Appendix II.

[21] Budget Report Forms, *op. cit*.

The Department seemed to be concerned about the handling of surpluses. If, for instance, a division set a rate of 40 mills in 1954 and thereby built up a surplus equivalent to 2 mills, it could benefit from the subsidy by an equal amount. Evidently, the Department did take surpluses into consideration as this memo from the Assistant Field Administrative Officer to the Minister of Education would indicate:

> Re: Tax Reduction Subsidy
>
> In reviewing Holden, Vermilion and Vegreville Divisions it might be argued that of these only Vegreville merits special consideration. It seems to me that one might advance the following reasons in support of special assistance for Vegreville.
>
> 1. Vermilion is apparently able to qualify with no difficulty and no necessity of using surplus funds to balance their budget. An increase of $848,127 in their already very substantial assessment might account for this.
>
> 2. While Holden has a decrease in assessment of $703,920 and an increase in services, their 1954 requisition rate was sufficient to produce a surplus of $51,000; this has the effect of producing a higher qualifying rate. Their 1955 estimates also indicate an ability to qualify without the use of surplus funds to balance.
>
> 3. Vegreville apparently has increased services with a reverse decrease in assessment of $126,382. This Division's 1954 requisition rate did not provide for any surplus and, therefore, their qualifying rate has not been supplemented accordingly. Their 1955 estimates indicate the necessity of using $51,000 of surplus funds in order to qualify.
>
> In view of this, we are disposed to recommend for approval an increase in the Vegreville qualifying rate. An increase of 2.23 mills would produce approximately $28,000, with the balance, roughly $23,000, to be provided from surplus funds. The 2.23 mills may be scaled down slightly, resulting in more surplus funds being required to balance. However, it is our opinion that the qualifying rate should not be below 29.75 mills.[22]

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[22] Budget Report Forms, op. cit.

This memo signified that surpluses in two other divisions were partly responsible for increasing the qualifying rate for Vegreville. As in the other documentary references in this chapter, the memo further exemplifies (1) the provincial problems in administering a formula which lacked objectiveness; (2) the provincial problem of avoiding too much interference in local autonomy.

Since the claim form made no reference to surpluses the Department often had to be subjective in the treatment of them. This resulted in flexibility in the interpretation of the formula. In effect, however, the Department did the best it could with the problem since the scheme did not seem to make any allowance for them.

III. SUMMARY

Was the formula too complex? The evidence suggests that it was. Besides, it is well known that the Department held discussions with board members and office staff in some areas to explain the scheme. The formula demanded hours of work by secretaries and superintendents as well as departmental officials. Two superintendents had to be called in to the Department to assist with the analysis of the claims. Two secretaries, however, did not appear to agree on the problem of complexity. In a personal interview in 1960, H. E. Todd, Secretary-Treasurer of Lacombe School Division since 1952, said, "I am glad we no longer have to deal with it." On the contrary, L. P. Williams, Secretary-Treasurer of the Municipality of Waverly since approximately 1935 and of the County of Stettler since its formation (representing about 25 years of secretarial experience with tax and grant formulae) said in a personal interview in

1960, "It was not any more complex than other [formulae] I have had to deal with." His background of secretarial experience may, however, be assumed to be the exception rather than the rule. At the same time he added a statement which seemed to agree with earlier criticisms cited in this thesis, quote: "But in my opinion it was not fair. It penalized a district that had been operating economically."

Could the formula always be adhered to? The treatment of some of the data in the formula had to be flexible and subjective. The fact that surpluses seemed to be overlooked in the original conception of the scheme resulted in subjectiveness. Moreover, though the Minister of Education said there would be no arbitrary setting of mill rates this had to be done in some cases. An analysis of the claims for the subsidy revealed that there were at least six school divisions or counties with one or more of the figures in the TRS claims arbitrarily set. It is evident that the formula could not always be applied in an objective manner.

Was the scheme costly to administer? The delegations from local school officials which travelled to discuss the scheme with departmental officials, the long distance calls, the man-hours spent on interpreting the formula and calculating the grant, the calling in of experts such as auditors and departmental officials are all indicative of the costliness of putting the plan into practice.

Did the scheme affect local autonomy? By the very nature of the scheme, the Department of Education had to take a hand in the affairs of local school government to a greater extent than had heretofore been done.

Boards were handicapped by the scheme because in order to qualify for the grant they could not always carry out their original plans.

CHAPTER V

AN EXAMINATION OF THE TRS IN PRINCIPLE

This chapter examines the scheme itself, considering its effect on local finance as if no other grants had been paid. The TRS as a single grant is first analyzed using the criterion of a basic program of $3,710 per classroom. This is done by comparing the actual TRS payments with the foundation program payments in regard to their respective contributions to the basic program. In addition, the actual TRS payments are correlated with assessments and this correlation is compared with the criterion correlation of one. Similarly, TRS payments expressed as mill rates are ranked and correlated with the rank order of assessments per classroom and this correlation is compared with that between flat grants and assessments.

I. COMPARISON OF ACTUAL TRS PAYMENTS WITH FOUNDATION PROGRAM PAYMENTS

According to the findings of the Cameron Commission[1] on education, 'equality of opportunity was favoured by all' who presented briefs to the Commission. Albertans, generally speaking, would seem to agree to the principle of equalizing opportunity for the children of this province. One way by which this can be done is to guarantee sufficient revenue

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[1] S.C.T. Clarke, Ed. D., General Secretary the Alberta Teachers' Association, The Cameron Report, A Condensation of the Report of the Royal Commission on Education in Alberta, the ATA Magazine, March 1960, p. 22.

to finance a minimum level of opportunity. This guaranteed revenue could, for example, be equivalent to $x per classroom or $y per pupil. In both cases, $x and $y would satisfy the foundation program approach. The guaranteed revenue would be made up of both provincial aid and local tax revenue. Mort and Reusser described a minimum educational level as follows:

> We are concerned fiscally primarily with the question: What minimum unit expenditure must be made possible in communities handicapped by the system of local support so that their children shall not be denied a program at least as good as might be expected from a satisfactory system of complete central support if that hypothetical system of central support were responsive to the needs?[2]

Thus, the foundation program guarantees sufficient revenue to make possible this 'minimum unit expenditure.'

Application of the foundation program plan. The following calculations show how the concept of the foundation program can serve as a device for implementing the level of instruction based on average practice as well as the apportioning of government aid on an equitable basis. The units used in the following example are for illustrative purposes only. Other units may be equally as good and therefore the choice of units is not a recommendation in itself.

1. Total classrooms as per 1956 Annual Report 4176

   Average expenditure as per criterion ....$3,710 (approx.)

   Total cost of instruction................$15,492,960.00

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[2] Mort and Reusser, op. cit., p. 387.

2. Total TRS payments as per 1956 Annual Report $3,272,783.48

3. Amount to be raised by tax $12,220,176.52

Total assessment $547,363,427.00

4. Qualifying mill rate for all districts 22.33

If each school unit were to levy taxes at the rate of 22.33 mills, the taxes raised could be subtracted from $3,710 (the foundation program) in order to arrive at the amount of grant per classroom. For instance, the County of Grande Prairie had an assessment of $105,612.50 (Appendix III) per classroom. The amount raised by a levy of 22.33 mills would be $2,358.32 per classroom. Therefore, the amount of grant under the foundation program plan for this county would equal $3,710 less $2,358.32 or $1,351.68 per classroom.

The grants were calculated in this manner and plotted on a graph. Figure 1, page 62, shows the grant for each school division and county according to the foregoing system of calculations. The assessments for these calculations were taken from Appendix III. The vertical scale represents dollars per classroom and the horizontal scale represents assessment per classroom. The part of the figure above the diagonal line represents the provincial share of the foundation program and the part below the diagonal represents the portion of the foundation program raised by local tax revenue.

This figure shows that if TRS moneys had been distributed according to the above plan then, firstly, the tax revenue would be directly proportional to ability to pay as measured by assessed values of property, secondly, the children of the divisions and counties of this province could have been assured of a foundation program of $3,710 per classroom because

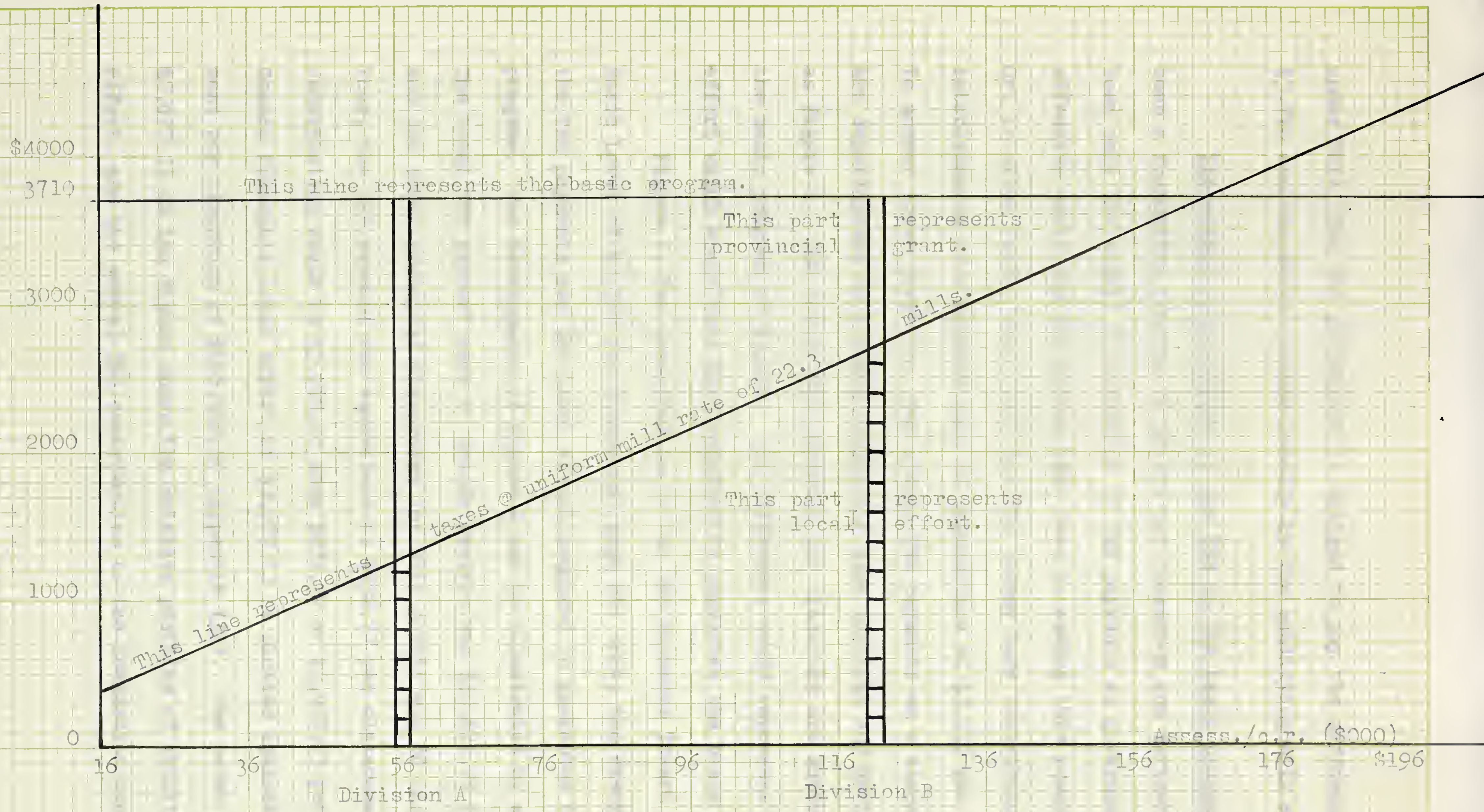
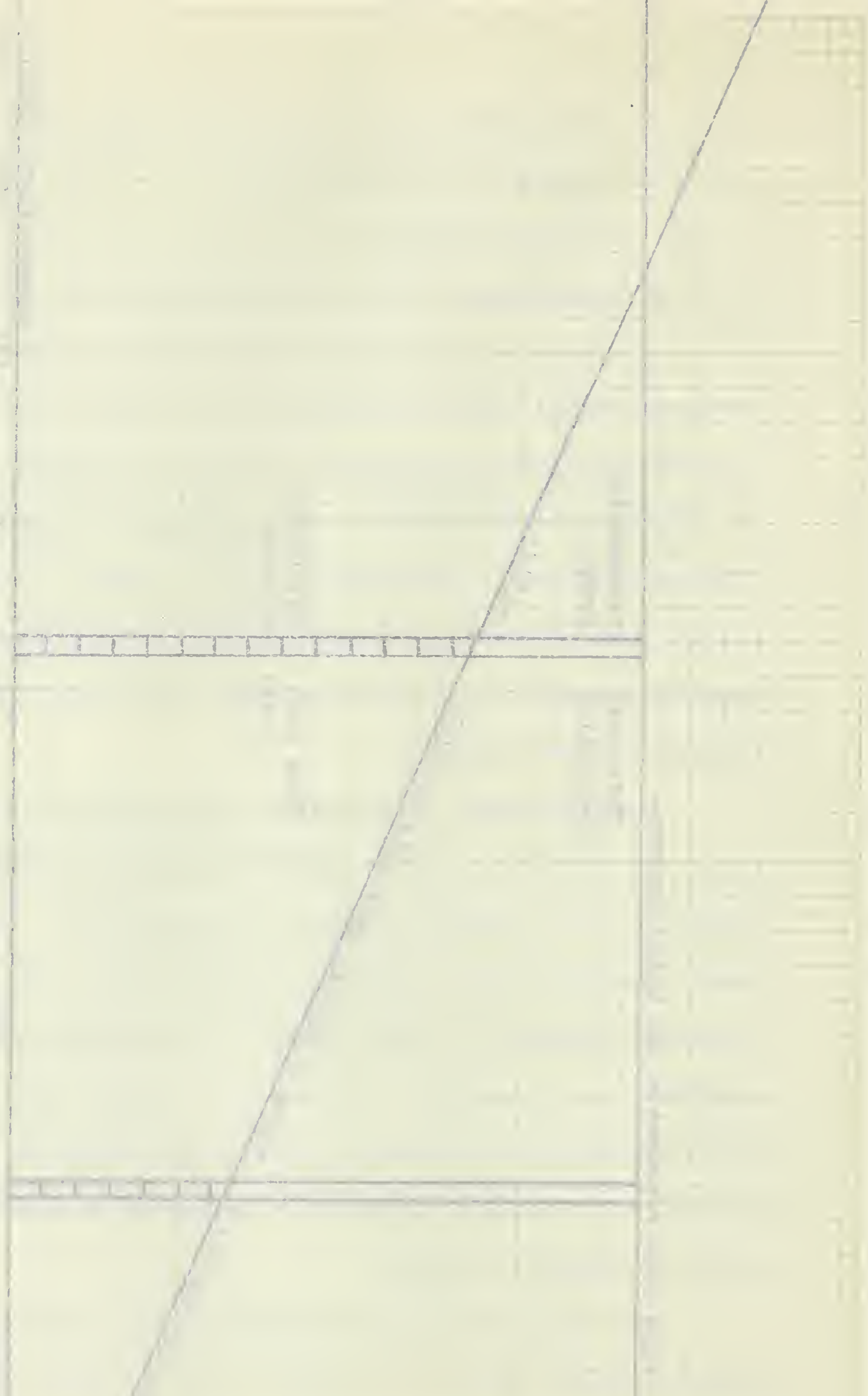


FIGURE 1

THE CONCEPTS OF (1) A GUARANTEED LEVEL OF SUPPORT (2) UNIFORM MILL RATE (3) EQUALIZATION GRANTS



under this plan the government is obliged to pay the difference between $3,710 and the amount raised locally by the qualifying mill rate.

The actual contribution of the TRS to the basic program. Had there been a foundation program of $3,710 per classroom and further had there been only the actual distribution of TRS payments as government aid, how effective would the TRS scheme have been in making this program possible? Or, in other words, what could the TRS scheme have contributed to the establishment of a minimum unit of expenditure of $3,710 per classroom? To answer these questions, the actual TRS payments on a classroom basis are superimposed on a graph having the same vertical and horizontal scales as Figure 1. The actual TRS payments per classroom are subtracted from the basic program of $3,710. The difference would represent the local effort which would have been required to guarantee the basic program.

Figure 2, The Contribution of the TRS Payments Toward Achieving a Basic Level of $3,710 Per Classroom, page 64, shows the distribution of the TRS payments and the local effort required to guarantee the basic program. The development of Figure 2 can be illustrated by example. The total TRS payment made to Grande Prairie was $50,621.79 (Appendix IV) and the total number of classrooms for this county was 80 (Appendix III). Thus, the TRS payment was equivalent to $632.77 per classroom. The local contribution would be $3,710.00 less $632.77 or $3,077.23 per classroom. Grande Prairie's local effort of $3,077.23 is plotted against its assessment per classroom of $105,612.50 (Appendix III). The point $105,612.50, $3,077.23 on the figure shows the relative position of ability, the local effort, and the actual TRS contribution to the foundation program for

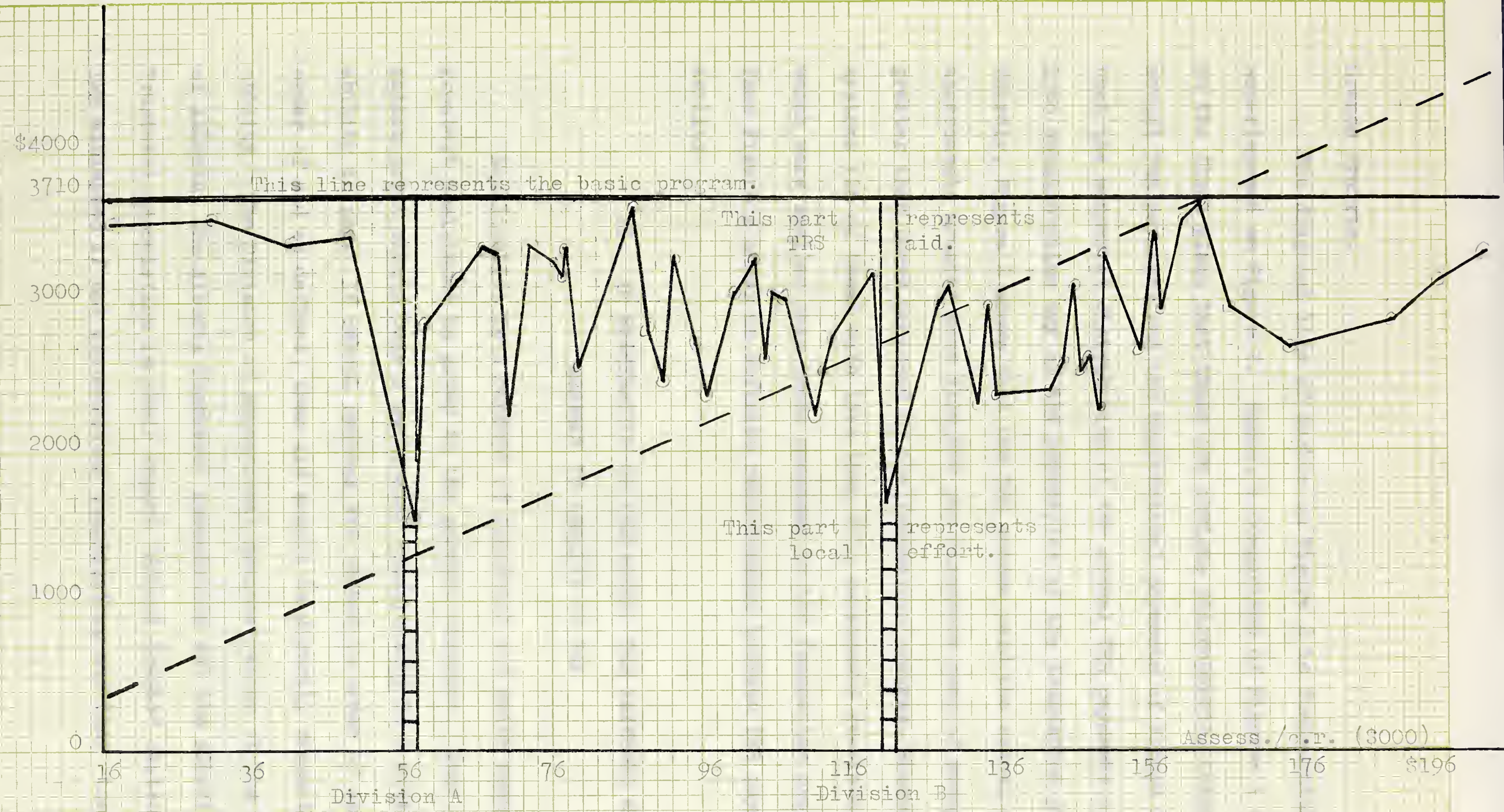
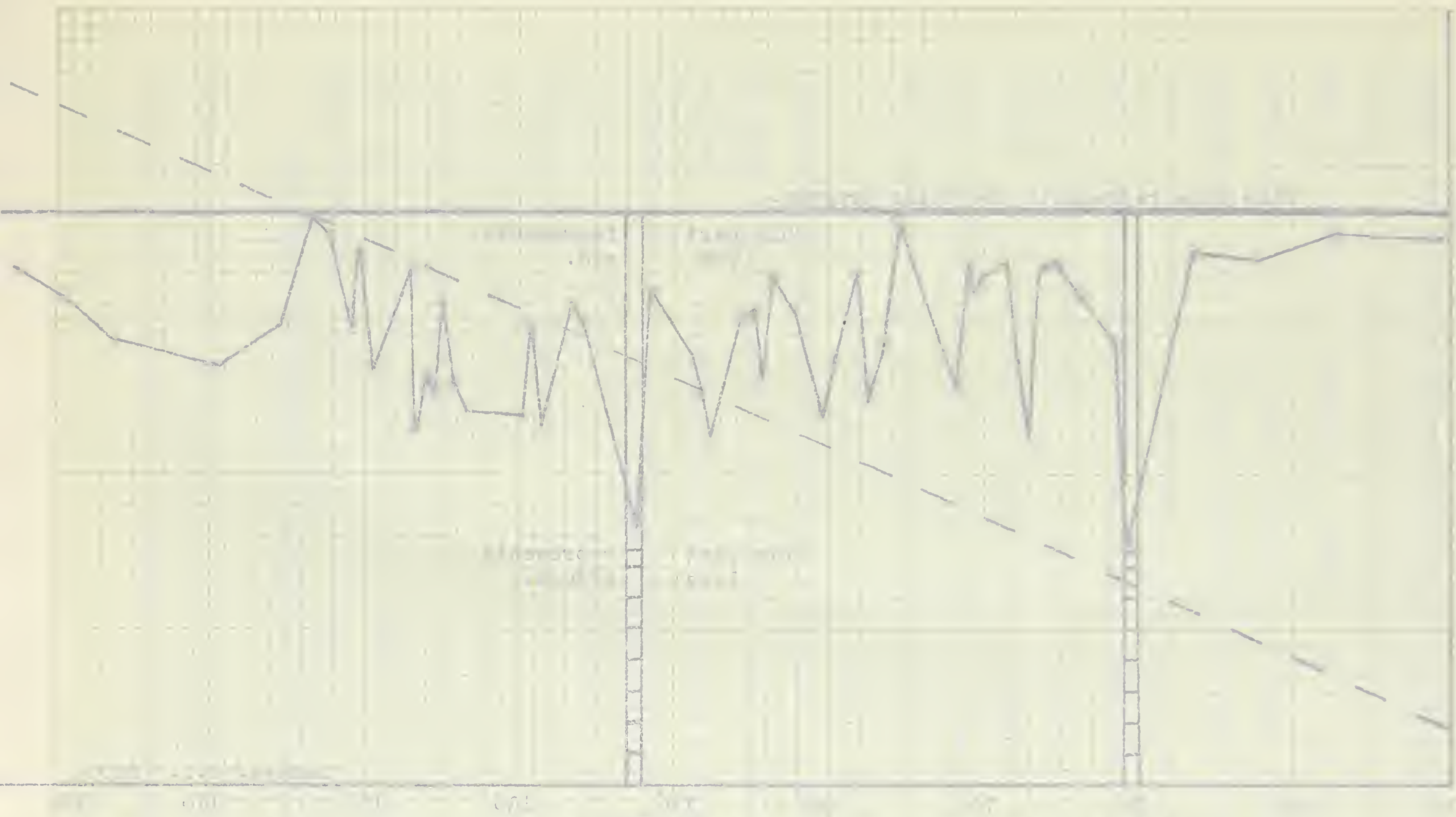


FIGURE 2

THE CONTRIBUTION OF THE TRS PAYMENTS TOWARD ACHIEVING THE BASIC LEVEL OF $3,710 PER CLASSROOM



Grande Prairie.

The diagonal line of dashes on Figure 2 is fundamentally Figure 1 superimposed on Figure 2. Hence, a comparison of Figures 1 and 2 shows in the first place that there are obvious discrepancies between the actual TRS payments and the hypothetical payments of Figure 1 and secondly, that the manner of distribution of the actual TRS payments did not take into consideration any of the principles of the foundation program concept. Thirdly, Figure 2 shows that the TRS scheme paid the school systems with assessments greater than $110,000 per classroom sums of money equal to or greater than those proposed by the foundation program, whereas the school systems (26 of them) with less than this assessment received sums of money which were smaller than those proposed by the foundation program plan. Thus Figure 2 shows no definite relationship between TRS payments and ability.

II. AN EXAMINATION OF THE ACTUAL TRS PAYMENTS WITH RESPECT TO ABILITY TO PAY

Equalization is a concept of financial aid which requires that the greatest assistance be given to the poorest district. Thus, an equalization grant should bear a particular relationship to a district's ability to pay. If school systems are ranked in order of ability and in order of aid as defined, then aid should be directly proportional to ability. The Division of Educational Administration of the University of Alberta, the Alberta Teachers' Association and the Alberta School Trustees' Association in their report "School Grants" stated that the TRS minimized if not counteracted equalization and that "the funds bore

no direct relationship to ability to pay."[3] The following paragraphs attempt to shed further light on the relationship between TRS payments and ability by means of a rank order correlation.

This was done by first ranking the assessment per classroom for each division and county in order of increasing size. The largest assessment per classroom was ranked 1 and the smallest 59. However, the TRS per classroom was ranked in decreasing order of size. That is, the smallest TRS per classroom was ranked 1 and the largest 59. Theoretically then, there should be no difference in the rank orders.

Table III gives the data for the correlation. Columns (2) and (3) give the rank order of ability and the rank order of aid respectively. Column (4) gives the difference between each pair of ranks and column (5) gives the square of the differences. Substituting the sum of the differences squared in Spearman's rank order correlation formula[4]

$$r = 1- \frac{6 \sum D^2}{N(N^2 - 1)}$$

where $\sum D^2$ equals 33908 and N equals 59, gives a correlation of 0.01 between aid and ability.

Table III shows that the majority of the rank order differences are unduly large. Two districts, Lac La Biche and Ft. Vermilion, had a difference of 53 in their respective rank orders between aid and ability.

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[3] School Grants. A Project in Canadian School Administration Prepared by the Division of Educational Administration (Edmonton: University of Alberta, 1959), p. 1.

[4] Garrett, op. cit., p. 355.

TABLE III

COMPARISON OF ABILITY TO PAY WITH THE TAX REDUCTION SUBSIDY GRANT

Division or County	Rank of Ability (2)	Rank of Aid (3)	D (4)	D^2 (5)	Division or County	Rank of Ability (2)	Rank of Aid (3)	D (4)	D^2 (5)
Grande Prairie	35	29	6	36	Vermilion	15	10	6	25
Vulcan	6	36	30	900	Castor	24	55	31	961
Ponoka	28	32	4	16	Macleod	4	8	4	16
Newell	55	59	4	16	Pincher Creek	13	7	6	36
Warner	18	54	36	1296	Drumheller	5	2	3	9
Stettler	9	37	28	784	Olds	10	46	36	1296
Thorhild	19	44	25	625	Wainwright	20	48	28	784
					Provost	11	33	22	484
Berry Creek	12	3	9	81	Red Deer	38	30	8	64
St. Mary's R.	36	43	7	49	Wetaskiwin	29	58	29	841
Foremost	21	27	6	36	Westlock	41	19	22	484
Medicine Hat	43	39	4	16	Foothills	2	13	11	121
Taber	33	56	23	529	Smoky Lake	45	45	0	0
Lethbridge	39	52	13	169	Wheatland	7	21	14	196
Acadia	37	18	19	361	Calgary	3	25	22	484
Sullivan Lake	42	50	8	64	Athabasca	51	16	35	1225
Peace River	44	4	40	1600	St. Paul	53	24	29	841
Lac Ste. Anne	47	23	24	576	Bonnyville	56	9	47	2209
Edson	50	57	7	49	Spirit River	48	20	28	784
Clover Bar	1	1	0	0	High Prairie	49	14	35	1225
Rocky Mt. H.	54	38	16	256	Leduc	23	51	28	784
Neutral Hills	27	28	1	1	Fairview	40	41	1	1
Holden	30	22	8	64	Lac La Biche	58	5	53	2809
Lamont	25	34	9	81	Ft. Vermilion	59	6	53	2809
Vegreville	14	35	21	441	East Smoky	57	11	46	2116
Camrose	17	17	0	0	Red Deer Val.	46	12	34	1156
Two Hills	31	40	9	81	Lacombe	22	47	25	625
Killam	16	42	26	676	Coal Branch	32	49	17	289
Stony Plain	34	31	3	9	Barrhead	52	15	37	1369
Sturgeon	26	53	27	729	Three Hills	8	26	18	324

All figures have been calculated.

For Killam and Vulcan the rank orders differed by 26 and 30, respectively. The second criterion of Chapter III, page 42, requires a difference of zero between rank order of aid and rank order of ability in order to produce a perfect correlation.

Statistically, the correlation of .01 obviously differs significantly from the criterion correlation. In fact it verifies what Figure 2, page 64, seems to indicate--that there was no relationship between TRS aid per classroom and assessment per classroom; in addition, it suggests that the TRS could have counteracted the principle of equalization.

III. AN EXAMINATION OF TRS PAYMENTS IN TERMS OF TAX RELIEF

To repeat what is often heard may appear trite and repetitious, but John public continues to repeat, "Property taxes just cannot go any higher." Tax relief seems to be a pressing need. Common sense tells us that it should be done fairly and equitably.

Table IV provides the data for a rank order correlation between ability and tax relief expressed in mills. In addition the table shows the tax relief given to each school system. Hence, the purpose of Table IV is to provide the data for both general and statistical observations pertaining to the examination of the effect of TRS payments on tax relief.

The TRS payments per classroom are listed in column (2) of Table IV. Each payment to the divisions and counties is converted to tax relief in mills by dividing the payment by each school system's assessment per classroom and multiplying the quotient by 1000 to convert to mill rates;

TABLE IV

TAX REDUCTION SUBSIDY GRANTS EQUATED TO MILL RATE REDUCTION

Division or County	TRS per Classroom (2)	Mill Rate Reduction (3)	Rank Order of Ability (4)	Rank Order of Tax Relief (5)	D (6)	D^2 (7)
Grande Prairie	$ 632.77	5.99	35	31	4	16
Vulcan	799.51	3.42	6	13	7	49
Ponoka	704.02	5.49	28	29.5	1.5	2.25
Newell	2,153.59	37.16	55	59	4	16
Warner	1,412.01	9.45	18	44	26	676
Stettler	838.74	4.45	9	19	10	100
Thorhild	1,085.35	7.41	19	36	17	289
Berry Creek	25.03	.15	12	3	9	81
St. Mary's River	1,078.74	10.35	36	48	12	144
Foremost	594.44	4.06	21	16	5	25
Medicine Hat	892.65	9.99	43	46	3	9
Taber	1,457.03	13.03	33	52	19	361
Lethbridge	1,310.16	13.59	39	54	15	225
Acadia	406.36	3.91	37	14	23	529
Sullivan Lake	1,202.88	13.20	42	53	11	121
Peace River	43.18	.49	44	4	40	1600
Lac St. Anne	539.19	6.98	47	37	10	100
Edson	1,472.64	21.27	50	58	8	64
Clover Bar	------	-----	1	1	0	0
Rocky Mtn. House	875.04	14.99	54	56	2	4
Neutral Hills	613.23	4.74	27	23.5	3.5	13.25
Holden	509.16	4.27	30	17.5	22.5	506.25
Lamont	720.47	5.35	25	28	3	9
Vegreville	749.09	4.75	14	23.5	9.5	90.25
Camrose	374.12	2.50	17	11	6	36
Two Hills	946.21	8.41	31	41	10	100
Killam	1,028.64	6.64	16	35	19	361
Stony Plain	672.52	6.33	34	33	1	1
Sturgeon	1,387.08	10.39	26	49	23	529
Vermilion	281.70	1.80	15	8	7	49
Castor	1,422.42	10.49	24	50	26	676
Macleod	222.67	.89	4	5	1	1
Pincher Creek	166.75	1.03	13	6	7	49
Drumheller	15.01	.06	5	2	3	9
Olds	1,111.76	6.35	10	32	22	484

TABLE IV (Continued)

Division or County	TRS per Classroom (2)	Mill Rate Reduction (3)	Rank Order of Ability (4)	Rank Order of Tax Relief (5)	D (6)	D^2 (7)
Wainwright	$1,170.22	8.00	20	40	20	400
Provost	717.85	4.27	11	17.5	6.5	42.25
Red Deer	644.78	6.43	38	34	4	16
Wetaskiwin	2,049.95	17.06	29	57	28	784
Westlock	414.75	4.50	41	21	20	400
Foothills	326.18	1.04	2	7	5	25
Smoky Lake	1,101.19	13.78	45	55	10	100
Wheatland	435.05	2.03	7	9	2	4
Calgary	558.80	2.25	3	10	7	49
Athabasca	352.44	5.18	51	27	24	576
St. Paul	555.61	8.87	53	42	11	121
Bonnyville	247.40	4.99	56	25.5	30.5	930.25
Spirit River	421.20	5.49	48	29.5	18.5	342.25
High Prairie	326.33	4.50	49	21	28	784
Leduc	1,290.62	9.00	23	43	20	400
Fairview	962.61	10.06	40	47	7	49
Lac La Biche	136.96	4.50	58	21	37	1369
Fort Vermilion	162.92	9.71	59	45	14	196
East Smoky	306.14	7.49	57	38	19	361
Red Deer Valley	312.71	4.02	46	15	31	961
Lacombe	1,118.45	7.70	22	39	17	289
Coal Branch	1,183.71	10.55	32	51	19	361
Barrhead	338.75	4.99	52	25.5	26.5	702.25
Three Hills	584.97	2.98	8	12	4	16

Source: Column (2) - Calculated from Appendices III & IV
Column (3) - Calculated from assessments in Appendix IV
Column (4) - Appendix IV
Columns (5), (6) and (7) were calculated from the table.

the rank order of ability in column (4) is the same as in Table III, page 67. Column (5) shows the order of the tax relief in mills from least reduction to greatest reduction. Columns (6) and (7) show the difference in rank between ability and tax relief and the differences squared respectively. Substituting in the same rank order correlation formula[5]

$$r = 1 - \frac{6 \sum D^2}{N(N^2-1)}$$

where $\sum D^2$ equals 17013 and N equals 59 gives a correlation of 0.50.

Observations. Any aid from a central government tends to give tax relief to local tax payers. This is usually reflected in reduced mill rates. Hence, any grant may be converted to mills in order to compare relative tax relief given to local governments. Table IV shows some extremely large differences in rank between ability and tax relief. For instance, Peace River differed in the two ranks by 40, Warner differed in the two ranks by 26, Wetaskiwin and High Prairie both differed in the two ranks by 28, just to mention a few.

Some statistical inferences from Table IV are noted. It is possible to get a rank order correlation between tax relief and ability of 1 by merely paying each school system a flat grant. For instance, a $200 flat grant to a district with an assessment of $1000 would give a tax relief of 200 mills. A $200 flat grant to a district with an assessment of $10,000 would give a tax relief of 20 mills. A $200 flat grant

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[5] Garrett, op. cit., p. 355.

to a district with an assessment of $100,000 would give a tax relief of 2 mills. Therefore, the rank order correlation of 0.50 between ability and tax relief calculated from the data in Table IV can only mean that the TRS payments were less effective in equalizing tax relief than are flat grants.

IV. SUMMARY

1. The actual TRS payments compare unfavorably with the hypothetical foundation program payments with respect to the criterion of guaranteeing sufficient funds for a basic program.

2. The distribution of the actual TRS payments favored many of the richer districts with larger portions of aid than would have been distributed to them by the foundation program plan.

3. In effect, the manner of distribution of the TRS payments did not exhibit any of the principles of the foundation program concept.

4. It can be shown that any flat grant if ranked in order of size according to the rule set down by Garrett will correlate 0.50 with the rank order of ability. The actual TRS payments correlated 0.01 with ability. Thus by implication the TRS payments were (1) not directly related to ability; (2) less effective than flat grants in the equalization of government aid; and (3) probably counteractive to the equalization principle.

5. The evidence indicates that the TRS was unfair in its equalization of tax relief. In fact, a flat grant would have equalized tax relief more fairly and effectively than did the TRS.

Note: Though rank orders of quantities are only rough measures in that they do not take the magnitude of the quantities into consideration, they can be useful measures when any change in rank produces a change in the rank order correlation.

CHAPTER VI

THE TOTAL FINANCIAL CONSEQUENCES

The TRS has been examined in principle in Chapter V. Chapter VI attempts to show the total financial consequences of the TRS when combined with other existing grants. Here are a few of the questions which Chapter VI will endeavor to answer. How did the mill-rate variability in 1954 compare with that in 1955? How did the instructional costs of 1954 compare with those for 1955? How effectively did the TRS achieve its primary objective of a qualifying tax levy? Did the TRS help the divisions and counties which were below the county and divisional average in instruction in 1954 to raise their standards in 1955 or did the ones which were already "above average" in 1954 gain the greater advantage from the TRS? In consequence of the answers to these questions, did the TRS remedy any weaknesses that may have existed in the grant system in 1954?

I. COMPARISON OF 1954 AND 1955 MILL RATE VARIABILITIES

The range and standard deviation of mill rates. The fact that school systems were supposed to reduce their tax levies to 25 mills in 1955 in order to qualify for the TRS would suggest that the mill rates in 1955 should have less spread than those in 1954. Table V shows the requisition mill rates for 1954 and for 1955. The assessments, effective for 1954 and 1955, were used as the basis for calculating the requisition rates. For instance, Grande Prairie requisitioned for $263,524 in 1954 on an assessment of $7,866,403. Thus the requisition rate for Grande

TABLE V

COMPARISON OF 1954 MILL RATES WITH 1955 MILL RATES

Division or County (1)	1954 Total Assessment as per Table 28 (2)	1954 Total Requisition (nearest $) (3)	1954 Rate (4)	1955 Total Assessment (5)	1955 Total Requisition (nearest $) (6)	1955 Rate (7)
Grande Prairie County	7,866,403	263,524	33.49	8,449,374	232,358	27.50
Vulcan	15,330,988	444,599	29.00	15,649,253	391,231	25.00
Ponoka	12,102,722	403,269	33.32	12,672,510	348,994	27.50
Newell	3,821,482	248,259	64.96	3,823,979	84,127	22.00
Warner	7,130,052	233,656	32.77	11,498,475	345,445	29.50
Stettler				11,300,045	312,551	27.50
Thorhild				8,788,335	219,708	25.00
Berry Creek	2,300,031	43,000	18.70	2,290,806	44,000	19.21
St. Mary's River	11,289,318	409,874	36.30	11,569,191	309,762	26.77
Foremost	6,877,382	207,996	30.24	7,448,802	200,243	27.00
Medicine Hat	5,279,693	190,059	36.00	5,891,528	176,756	30.00
Taber	10,897,924	420,095	38.54	11,291,647	304,270	26.94
Lethbridge	13,106,787	539,571	41.16	12,908,979	344,479	26.68
Acadia	4,436,159	139,141	31.36	4,457,621	122,585	27.50
Sullivan Lake	3,496,197	135,578	38.78	2,913,878	72,846	25.00
Peace River	6,921,921	256,111	37.00	7,491,472	206,015	27.50
Lac Ste Anne	6,037,572	193,202	32.00	6,093,910	195,005	32.00
Edson	4,388,635	206,265	47.00	4,777,275	119,432	25.00
Clover Bar	39,448,802	940,000	23.83	38,762,814	563,200	14.50
Rocky Mountain House	7,245,084	296,931	40.98	4,141,900	117,466	28.36
Neutral Hills	3,834,258	123,655	32.25	3,356,675	92,309	27.50
Holden	12,775,788	398,199	31.16	12,019,798	332,694	27.67
Lamont	12,456,099	393,490	31.59	12,120,090	292,427	24.12
Vegreville	12,742,701	372,175	29.21	12,616,319	340,640	27.00
Camrose	14,491,495	435,460	30.04	15,713,108	432,800	27.54
Two Hills	8,757,135	280,228	32.00	8,663,399	216,585	25.00

TABLE V (continued)

Division or County (1)	Total Assessment as per Table 28 (2)	Total Requisition (nearest $) (3)	Rate (4)	Total Assessment (5)	Total Requisition (nearest $) (6)	Rate (7)
Killam	10,872,237	334,517	30.76	10,982,576	315,742	28.74
Stony Plain	10,542,246	337,752	32.03	11,049,313	276,633	25.03
Sturgeon	12,911,281	438,983	34.00	12,003,613	366,110	30.50
Vermilion	16,367,353	452,114	27.62	17,215,480	457,797	26.59
Stettler	11,482,309	344,445	30.00			
Castor	9,038,137	325,054	35.96	6,908,934	192,796	27.90
Macleod	14,914,382	278,559	18.87	15,340,100	332,242	21.65
Pincher Creek	6,471,366	187,715	29.00	6,413,685	179,300	27.95
Drumheller	14,582,233	381,455	26.15	8,189,986	210,550	25.70
Olds	16,040,256	532,229	33.18	13,654,162	376,489	27.57
Wainwright	10,082,861	333,474	33.07	9,654,316	265,494	27.50
Provost	7,268,387	224,910	30.94	7,547,550	192,118	25.45
Red Deer	9,431,902	288,241	30.56	13,136,280	372,348	28.34
Wetaskiwin	8,583,443	283,256	33.00	8,769,364	254,312	29.00
Westlock	6,443,094	208,212	32.31	7,834,239	197,888	25.25
Foothills	12,505,295	285,119	22.79	12,426,144	323,080	26.22
Smoky Lake	4,969,545	198,782	40.00	5,034,475	135,932	27.00
Wheatland	16,336,076	475,346	29.09	13,862,100	381,208	27.50
Calgary	14,250,263	430,518	30.21	18,866,877	473,217	25.08
Athabasca	4,657,612	151,394	32.50	6,114,479	161,326	26.38
Bow Valley	5,128,811	125,656	24.50			
St. Paul	4,984,163	184,414	37.00	5,006,353	172,719	34.50
Bonnyville	3,753,418	112,603	30.00	4,601,750	115,044	25.00
Spirit River	5,441,983	183,052	33.63	5,513,943	141,314	25.60
High Prairie	6,183,576	199,964	32.33	6,297,439	157,436	25.00
Strawberry	4,793,702	172,573	36.00	18,355,485	459,687	25.04
Fairview	4,549,158	159,221	35.00	4,684,030	128,810	27.50
Lac La Biche	2,185,555	69,938	32.00	1,704,435	46,872	27.50
Fort Vermilion	134,551	5,000	37.20	151,170	4,157	27.50
East Smoky	697,045	24,397	35.00	775,575	21,328	27.50

TABLE V (continued)

Division or County (1)	Total Assessment as per Table 28 (2)	Total Requisition (nearest $) (3)	Rate (4)	Total Assessment (5)	Total Requisition (nearest $) (6)	Rate (7)
Red Deer Valley	2,374,970	103,272	43.48	2,178,085	89,179	40.94
Lacombe	14,931,429	464,987	31.14	15,687,449	455,915	29.06
Thorhild	9,377,831	309,468	33.00			
Coal Branch	2,964,185	121,255	40.90	2,241,875	72,179	32.19
Barrhead	5,028,614	163,429	32.50	4,742,523	135,162	28.50
Three Hills				13,708,459	383,721	27.50

Sources: Columns 2, 3, 5 and 6 from Annual Reports, 1955 and 1956.
Columns 4 and 7 calculated.

Prairie was $33.49. Similarly for 1955, this county had a requisition rate of 27.50 mills. All assessments and requisitions for 1954 and 1955 were taken from the 1955 and 1956 Annual Reports of the Department of Education respectively.

In 1954 the highest mill rate recorded was 64.96 for the County of Newell and the lowest was 18.70 for Berry Creek. The range in mill rates for 1954 was 64.96 less 18.70 or 46.26 mills. In 1955 the highest mill rate was 40.94 for Red Deer Valley and the lowest was 14.50 for Clover Bar. Hence, the mill-rate range in 1955 was 26.44 mills. This general observation of Table V shows that the 1955 range in mill rates had decreased by 19.82 mills. Thus the range in mill rates had been reduced considerably.

Statistically however, the standard deviation of mill rates would be considered a more reliable method of measuring dispersion. It is the square root of the mean of the squared deviations taken from the arithmetical mean of the mill rates. The formula $o = i\sqrt{\frac{\Sigma fx'^{2}}{N} - c^{2}}$[1] gives a standard deviation for the 1954 rates of 6.84 mills and a standard deviation for the 1955 rates of 2.74 mills. Table VI summarizes the test for the significance of the difference in standard deviations. Table F[2] gives a critical ratio of 1.34 and 1.60 as being significant at the .10 and .02 level of confidence, respectively. Since such a

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[1] Garrett, *op. cit.*, p. 54.

[2] Ibid., p. 429.

TABLE VI

AN ANALYSIS OF THE 1954 AND 1955 STANDARD DEVIATIONS OF THE MILL RATES

Year	Standard deviations	Difference	Critical ratio
1954	6.84		
1955	2.74	4.10	6.23

difference could occur less than once in 50 by chance, it is evident that the reduction in variability of mill rates was due to something other than chance. The writer is inclined to give the credit to TRS.

Requisition mill rates and the TRS. Prior to the inauguration of the TRS, units had been expending on the basis of expectations for provincial revenue according to the past grants schedule. Although it is not proven here that such is the case, local expenditures, in large part, could have caused local mill rates to be higher than 25 because local school systems exceeded average practice either through uneconomic management or through a desire to provide a good education. Ordinarily, excess spending would result in higher tax rates and since the TRS gave greater assistance to the districts with high 1954 mill rates, then the TRS could have rewarded uneconomic management and vice versa or it could have rewarded those which provided a good education.

A few random samples will show that the TRS payments were directly proportional to the 1954 mill rates. Berry Creek with a 1954 mill rate of 18.70 earned a TRS of $25.03 per classroom. Pincher Creek with a

mill rate of 29.00 earned a TRS of $166.75 per classroom. Taber with a mill rate of 38.54 mills earned a TRS of $1,457.03 per classroom. Newell with a mill rate of 64.96 in 1954 received a TRS of $2,153.59 per classroom. The latter is an intriguing example and needs further examination.

This county reduced its mill rate from 64.96 mills in 1954 to 22 mills in 1955. This raises the question-- Where did this county cut expenditures whereby it could budget on 22 mills in 1955 when it had to levy 64.96 mills the previous year? Items which showed a decrease in expenditure from 1954 to 1955 were as follows: Administration, Other Instruction, and All Other Expenditures.[3] Regardless of a saving on some items, total expenditures increased from $482,618.07 in 1954 to $525,875.38 in 1955.[4] The Department had some difficulty with the claim for the TRS submitted by this county and had to resort to the practice of arriving at the qualifying mill rate "arbitrarily."[5]

The evidence, though not conclusive, points out the possibility that the TRS scheme could, in theory at least, pay extra grant for uneconomic management and further emphasizes the danger of unfairness in subjective interpretation of grant formula.

A comparison of 1954 and 1955 mill rates with a qualifying rate of 25 mills. The primary objective of the TRS was to establish a qualifying tax levy of 25 mills. The criterion of 25 mills established in Chapter III can be used to determine the degree to which the TRS

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[3] Department of Education, Annual Reports, Table 27(b), 1955 and 1956.

[4] Ibid.

[5] Budget Report Forms, op. cit.

achieved this objective.

Table VII shows how much the 1954 and 1955 requisition rates deviated from a qualifying rate of 25 mills. For example, Grande Prairie had a mill rate of 33.49 in 1954 and 27.50 in 1955 each of which deviated from 25 mills by 8.49 and 2.50 mills respectively. The two deviations differed by 8.49 less 2.50 or 5.99 mills. Column (4) of Table VII shows these differences in deviations from 25 mills for all divisions and counties. Columns (5) and (6) are used to determine whether or not the differences in deviations from 25 mills are significant. The "x" in column (5) represents the amount by which the differences in column (4) deviate from the mean of the differences in column (4). Column (6) shows the squares of the deviations from the mean. From this data one can test statistically whether or not the mill rates in 1955 were significantly closer to a qualifying rate of 25 mills than in 1954. The test is shown as follows:

Formula used:[6]	Data	Formula used:[7]	Data
1. $\Sigma\{\text{Col.}(1) - \text{Col.}(2)\}$	356.91	2. $M_D = \frac{\Sigma\{\text{Col.}(1)-\text{Col.}(2)\}}{N}$	6.37
3. Σx^2	1264.41	4. $S.D._D = \sqrt{\frac{\Sigma x^2}{N-1}}$	4.79
5. SE_{M_D} or $\frac{SD_D}{N}$	0.64	6. $t = \frac{M_D - 0}{SE_{M_D}}$	9.94

Critical ratios (t) of 2.00 and 2.66 are significant at the .05 and .01 levels of confidence,[8] respectively. A "t" of 9.94 implies that the

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[6] Garrett, *op. cit.*, p. 227.

[7] *Ibid.*

[8] *Ibid.*, p. 427.

TABLE VII

COMPARISON OF MEAN DEVIATIONS FROM 25 MILLS

District (1)	Deviation from 25 mills 1954 (2)	Deviation from 25 mills 1955 (3)	Difference (2) - (3) (4)	x (5)	x^2 (6)
Grande Prairie	8.49	2.50	5.99	- .38	.14
Vulcan	4.00	00	4.00	-2.37	5.62
Ponoka	8.32	2.50	5.82	- .55	.30
Newell	39.96	-3.00	42.96	36.59	133.88
Warner	7.77	4.50	3.27	-3.10	9.61
Stettler	-	2.50			
Thorhild	-	00			
Berry Creek	-6.30	-5.79	- .51	6.88	47.33
St. Mary's River	11.30	1.77	9.53	3.16	9.99
Foremost	5.24	2.00	3.24	-3.13	9.80
Medicine Hat	11.00	5.00	6.00	- .37	.14
Taber	13.54	1.94	11.60	5.23	27.35
Lethbridge	16.16	1.68	14.48	8.11	65.77
Acadia	6.36	2.50	3.86	-2.51	6.30
Sullivan Lake	13.78	00	13.78	7.41	54.91
Peace River	12.00	2.50	9.50	3.13	9.80
Lac Ste. Anne	7.00	7.00	00	-6.37	40.58
Edson	22.00	00	22.00	15.63	244.30
Clover Bar	-1.17	-10.50	9.33	2.96	8.76
Rocky Mt. House	15.98	3.36	12.62	6.25	39.06
Neutral Hills	7.25	2.50	4.75	-1.62	2.62
Holden	6.16	2.67	3.49	-2.88	8.29
Lamont	6.59	- .88	7.47	1.17	1.37
Vegreville	4.21	2.00	2.21	-4.16	17.31
Camrose	5.04	2.54	2.50	-3.87	14.98
Two Hills	7.00	00	7.00	.63	.40
Killam	5.76	3.74	2.02	-4.35	18.92
Stony Plain	7.03	.03	7.00	.63	.40
Sturgeon	9.00	6.50	2.50	-3.87	14.98
Vermilion	2.62	1.59	1.03	-5.34	28.52
Stettler	5.00	-	-	-	
Castor	10.96	2.90	8.06	1.69	2.86
Macleod	-6.13	-3.35	-2.78	-9.15	83.72
Pincher Creek	4.00	2.95	1.05	-5.32	28.30
Drumheller	1.15	.70	.45	-5.92	35.05
Olds	8.18	2.57	5.61	- .66	.44
Wainwright	8.07	2.50	5.57	- .80	.64
Provost	5.94	.45	5.49	- .88	.77
Red Deer	5.56	3.34	2.22	-4.15	17.22
Wetaskiwin	8.00	4.00	4.00	-2.37	5.62

TABLE VII (continued)

District (1)	Deviation from 25 mills 1954 (2)	Deviation from 25 mills 1955 (3)	Difference (2) - (3) (4)	x (5)	x^2 (6)
Westlock	7.31	.25	7.06	.69	.48
Foothills	-2.21	1.22	-3.43	-9.80	96.04
Smoky Lake	15.00	2.00	13.00	6.63	43.96
Wheatland	4.09	2.50	1.59	-4.78	22.85
Calgary	5.21	.08	5.13	-1.24	1.54
Athabasca	7.50	1.38	6.12	- .25	.63
Bow Valley	.50	-	-		
St. Paul	12.00	9.50	2.50	-3.87	14.98
Bonnyville	5.00	00	5.00	-1.37	1.88
Spirit River	8.63	.62	8.01	1.64	2.69
High Prairie	7.33	00	7.33	.96	.92
Strawberry	11.00	.04	10.96	4.59	21.07
Fairview	10.00	2.50	7.50	1.13	1.28
Lac La Biche	7.00	2.50	4.50	-1.87	3.50
Fort Vermilion	12.20	2.50	9.70	3.33	11.09
East Smoky	10.00	2.50	7.50	1.13	1.28
Red Deer Valley	18.48	15.94	2.54	-3.83	14.67
Lacombe	6.14	4.06	2.08	-4.29	18.40
Thorhild	8.00	-	-		
Coal Branch	15.90	7.19	8.71	2.34	5.48
Barrhead	7.50	3.50	4.00	-2.37	5.62
Three Hills	-	2.50	-		

Source: Columns (2) and (3) calculated from Table V
Columns (4), (5) and (6) calculated.

difference in mean deviations of 6.37 is highly significant. Thus, the tax rates in 1955 were closer to the uniform rate of 25 mills than they were in 1954. This did not happen by chance and undoubtedly the TRS did reduce the variability in mill rates.

A qualifying tax levy was, however, not completely achieved as Table VII indicates. There were many excess deviations. For instance, Berry Creek deviated from the qualifying rate by -5.79 mills, St. Paul

by + 9.50 mills, Red Deer Valley by + 15.94 mills and so on. Some rates remained high in relation to the qualifying rate. Red Deer Valley with a comparatively high mill rate of 43.98 in 1954 received a subsidy only large enough to reduce the rate to 40.94 mills in 1955. Others whose rates remained higher than average were Lac Ste. Anne, Sturgeon, and Coal Branch.

II. THE EFFECT OF TRS ON EQUALIZATION

It has been stated that the TRS grants may have counteracted the equalization grants in existence prior to its introduction in 1955. Further examination of this hypothesis is needed. If this hypothesis were true, then the addition of the TRS grants to the equalization grants payable in 1956 under Sections 3 and 4 of the Grant Regulations[9] should have had an adverse effect on the relationship between grants and ability. The validity of this reasoning can be illustrated. If, for instance, the ability of 59 school systems ranked 1, 2, 3, 4, ... to 59 and an equalization grant correspondingly ranked 1, 2, 3, 4, ... to 59, the rank order correlation would be 1. Assuming that an additional grant changed the rank order slightly to 1, 2, 4, 3, ... to 59, the rank order correlation would be reduced by $\frac{6\Sigma D^2}{N(N^2-1)}$ or 0.00005. Thus, the rank-order correlation formula would detect changes in the rank order of aid.

Therefore, the effect of TRS on equalization may be examined by computing the correlation of equalization grants payable in 1956 with

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[9] Appendix I.

ability and the correlation of the sum of the same equalization grants plus TRS grants with ability and then comparing the two correlations. This calls for two correlation calculations--equalization grants with ability and TRS grants plus equalization grants with ability.

Correlation of equalization grants with ability. The data for calculating a rank order correlation of equalization grants with ability are shown in Table VIII. For example, Grande Prairie earned a pupil equalization grant as per Section 3 of $6,315 and a classroom equalization grant as per Section 4 of $112,970.71. Their sum divided by the number of classrooms is shown in the table as $1,517.62 per classroom. Also, the table shows that Grande Prairie ranked 35 in ability and 34 in aid. The rank orders differ by 1. In column (5) of Table VIII nine divisions and counties which received no aid were each given a rank of 5 as suggested by Garrett.[10] Spearman's formula for rank correlations gives a correlation of .93. The relatively high correlation indicates that these grants were generally related to ability. Not all districts, however, received sufficient funds to make equalization complete.

TRS grants plus equalization grants correlated with ability. If the aid received under TRS is added to equalization grants, the effect on equalization can be determined. Table IX shows the sum of the TRS grants and the equalization grants of Sections 3 and 4 both of which were payable in 1956. Thus, the sum of the two grants may be compared

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[10] Garrett, op. cit., p. 354.

TABLE VIII

COMPARISON OF EQUALIZATION GRANTS PAID IN 1956 WITH ABILITY TO PAY

Division or County (1)	Total Grants Section 3(b) & Section 4 (2)	Operating Class-rooms (3)	Equalization Grant per Operating Classroom (4)	Rank Order of Ability (5)	Rank Order of Aid (6)	Difference "D" (7)	Difference "D^2" (8)
Grande Prairie	$119,285.71	80	$1,517.62	35	34	1	1
Vulcan	-----	67	-----	6	5	1	1
Ponoka	100,875.79	99	1,018.94	28	6	2	4
Newell	187,361.82	66	2,838.81	55	53	2	4
Warner	30,306.99	77	393.59	18	11	7	49
Stettler	-----	60	-----	9	5	4	16
Thorhild	52,675.35	60	877.92	19	22	3	9
Berry Creek	28,744.87	14	2,053.20	12	42	30	900
St. Mary's River	142,198.54	111	1,281.06	36	30	6	36
Foremost	54,168.04	51	1,062.11	21	27	6	36
Medicine Hat	124,977.91	66	1,893.60	43	39	4	16
Taber	149,914.64	101	1,484.30	33	33	0	0
Lethbridge	209,667.21	134	1,564.68	39	35	4	16
Acadia	77,311.80	43	1,797.94	37	37	0	0
Sullivan Lake	62,320.84	32	1,947.52	42	40	2	4
Peace River	178,291.71	86	2,073.15	44	44	0	0
Lac St. Anne	183,567.53	79	2,323.63	47	48	1	1
Edson	170,207.65	69	2,466.77	50	50	0	0
Clover Bar	-----	67	-----	1	5	4	16
Rocky Mtn. House	174,117.41	71	2,452.35	54	49	5	25
Neutral Hills	55,349.74	26	2,128.83	27	45	18	324
Holden	95,205.79	101	942.63	30	24	6	36
Lamont	99,341.71	90	1,103.79	25	29	4	16
Vegreville	52,430.52	80	655.38	14	17	3	9
Camrose	93,406.12	105	889.58	17	23	6	36
Two Hills	131,581.21	77	1,708.84	31	36	5	25
Killam	51,364.32	71	723.44	16	19	3	9
Stony Plain	139,776.88	104	1,344.00	34	31	3	9
Sturgeon	77,622.90	90	862.47	26	21	5	25
Vermilion	37,140.15	110	337.63	15	10	5	25

TABLE VIII (continued)

Division or County (1)	Total Grants Section 3(b) & Section 4 (2)	Operating Class-rooms (3)	Equalization Grant per Operating Classroom (4)	Rank Order of Ability (5)	Rank Order of Aid (6)	Difference "D" (7)	Difference "D^2" (8)
Castor	$ 48,401.34	51	$ 949.04	24	25	1	1
Macleod	-----	62	-----	4	5	1	1
Pincher Creek	17,095.78	40	427.39	13	12	1	1
Drumheller	-----	35	-----	5	5	0	0
Olds	40,899.20	78	524.34	10	13	3	9
Wainwright	37,017.03	66	560.86	20	14	6	36
Provost	31,040.96	45	689.79	11	18	7	49
Red Deer	140,064.48	131	1,069.19	38	28	10	100
Wetaskiwin	102,038.56	73	1,397.78	29	32	3	9
Westlock	166,346.90	85	1,957.02	41	41	0	0
Foothills	-----	40	-----	2	5	3	9
Smoky Lake	172,116.16	63	2,732.00	45	52	7	49
Wheatland	-----	65	-----	7	5	2	4
Calgary	-----	76	-----	3	5	2	4
Athabasca	258,154.39	90	2,868.38	51	54	3	9
St. Paul	210,541.23	80	2,631.76	53	51	2	4
Bonnyville	300,382.80	93	3,229.92	56	57	1	1
Spirit River	155,260.70	72	2,156.39	48	47	1	1
High Prairie	187,461.21	87	2,154.72	49	46	3	9
Leduc	77,117.24	128	602.47	23	16	7	49
Fairview	101,247.00	49	2,066.26	40	43	3	9
Lac La Biche	184,175.24	56	3,288.84	58	58	0	0
Fort Vermilion	34,561.52	9	3,840.16	59	59	0	0
East Smoky	57,596.62	19	3,031.40	57	55	2	4
Red Deer Valley	51,820.75	28	1,850.74	46	38	8	64
Lacombe	64,695.81	108	599.03	22	15	7	49
Coal Branch	14,873.44	20	743.67	32	20	12	144
Barrhead	212,420.50	70	3,034.57	52	56	4	16
Three Hills	-----	70	-----	8	5	3	9

Source: Columns (2) and (3), Annual Report 1956.
Colums (4) to (8) inc. calculated.

to ability. For example, Grande Prairie earned the sum of $2,150 per classroom with a rank order of ability of 35 and a rank order of aid of 31. The ranks differ by 4. Spearman's rank order correlation formula gives a correlation of .89. Therefore, the addition of the TRS to equalization grants reduce the correlation between aid and ability from .93 to .89. This reduction shows that the TRS payments, the only variable introduced in the calculations, counteracted the principle of equalization because it had the effect of reducing the relationship between aid and ability.

In addition, the columns of Table IX showing the differences in rank between aid and ability reveal some glaring discrepancies. The differences range from Wetaskiwin's high of 25 to Clover Bar's low of zero. Table IX shows there were 11 districts with a difference between aid and ability greater than 10. Table VIII on page 84 shows that prior to adding the TRS payments to the equalization grants four districts had a difference between ability and aid greater than 10.

Significance of differences between correlations of aid with ability and criterion correlation. The total equalization feature of the TRS and equalization grants (combined or singly) may be measured by comparing them with the foundation program criterion of equalization. Table X shows the comparisons of the aid-ability correlations of these grants with the criterion aid-ability of unity. Even the actual equalization grants of Sections 3 and 4 differ significantly from the foundation program method of equalizing aid. However, since the TRS is the main concern, the larger critical ratios of 15.68 and 8.26 are obviously

TABLE IX

RELATIONSHIP BETWEEN EQUALIZATION GRANTS (INCLUDING TRS) AND ABILITY

(1)	Equalization Grant as per 3(b) and 4 + TRS (nearest dollar) (2)	Rank Order of Aid (3)	Rank Order of Ability (4)	D (5)	D^2 (6)
Grande Prairie	$2,150	31	35	4	16
Vulcan	800	10	6	4	16
Ponoka	1,723	20	28	8	64
Newell	4,992	59	55	4	16
Warner	1,806	23	18	5	25
Stettler	839	11	9	2	4
Thorhild	1,963	27	19	8	64
Berry Creek	2,078	29	12	17	289
St. Mary's R.	2,360	35	36	1	1
Foremost	1,657	17	21	4	16
Medicine Hat	2,786	42	43	1	1
Taber	2,941	45	33	12	144
Lethbridge	2,875	44	39	5	25
Acadia	2,204	33	37	4	16
Sullivan L.	3,150	47	42	5	25
Peace River	2,116	30	44	14	196
Lac Ste. Anne	2,863	43	47	4	16
Edson	3,939	57	50	7	49
Clover Bar	-	1	1	0	0
Rocky Mountain	3,327	50	54	4	16
Neutral Hills	2,742	41	27	14	196
Holden	1,452	15	30	15	225
Lamont	1,824	24	25	1	1
Vegreville	1,404	13	14	1	1
Camrose	1,264	12	17	5	25
Two Hills	2,655	40	31	9	81
Killam	1,752	22	16	6	36
Stony Plain	2,017	28	34	6	36
Sturgeon	2,250	34	26	8	64
Vermilion	619	9	15	6	36
Castor	$2,371	36	24	12	144
Macleod	223	3	4	1	1
Pincher Creek	594	8	13	5	25
Drumheller	15	2	5	3	9
Olds	1,636	16	10	6	36
Wainwright	1,731	21	20	1	1
Provost	1,408	14	11	3	9
Red Deer	1,714	18	38	20	400
Wetaskiwin	3,448	54	29	25	625
Westlock	2,372	37	41	4	16
Foothills	326	4	2	2	4
Smoky Lake	3,833	56	45	11	121
Wheatland	435	5	7	2	4
Calgary	559	6	3	3	9
Athabasca	3,221	49	51	2	4
St. Paul	3,187	48	53	5	25
Bonnyville	3,477	55	56	1	1
Spirit River	2,578	39	48	9	81
High Prairie	2,481	38	49	11	121
Leduc	1,893	25	23	2	4
Fairview	3,029	46	40	6	36
Lac La Biche	3,426	53	58	5	25
Ft.Vermilion	4,003	58	59	1	1
East Smoky	3,338	51	57	6	36
Red Deer V.	2,163	32	46	14	196
Lacombe	1,717	19	22	3	9
Coal Branch	1,927	26	32	6	36
Barrhead	3,373	52	52	0	0
Three Hills	585	7	8	1	1

Source: Column (2) Calculated from Appendixes III and IV.
Column (4) Appendix III.
Columns (3), (5) and (6) calculated.

TABLE X

COMPARISON OF ACTUAL AID-ABILITY CORRELATIONS WITH CRITERION AID-ABILITY CORRELATION

Correlation variables	Corr. ratio	Criterion ratio	Difference		C.R.	Level of Sig.
Equalization vs. Ability	.93	1				
Corres. Z-function	1.66	2.99	1.33	.19	6.85	.01
TRS plus equal vs. Ability	.89	1				
Corres. Z-function	1.44	2.99	1.59	.19	8.26	.01
TRS vs Ability*	.01					
Corres. Z-function	.01	2.99	2.98	.19	15.68	.01

*Chapter V, page 64.

significant. The data in Table X reaffirms the statement that "the TRS counteracted equalization."

III. THE EFFECT OF TRS ON BELOW AVERAGE EXPENDITURES ON INSTRUCTION IN 1954

Grants, other than the TRS, which were in effect in 1954 were paid on the same basis in 1955-that is they were paid on the basis of the 1954-1955 school operations and according to the same formula as in 1954. A comparison of ability in 1954 with ability in 1955 showed that there was not a noticeable difference in ability. One might assume that over a period of one year ability to pay would not change to any great extent. The average expenditure on instruction in 1954 was $3,340 per classroom in the divisions and counties of Alberta while the average expenditure for instruction in 1955 was $3,710 per classroom. The average TRS per classroom for the same school systems in 1955 was $783.70. Appendix V

summarizes instructional expenditures for 1954 and 1955. Column (3) shows whether or not divisions and counties spent more or less than $3,340 per classroom in 1954 and column (5) shows whether or not they spent more or less than $3,710 per classroom. Column (6) shows the districts which received more or less than the TRS average payment. Twenty districts were above the average instructional expenditure in both 1954 and in 1955. Of these, 11 received greater than average TRS per classroom. Only three districts which were below average in 1954 received more than the average TRS per classroom in 1955. There were 20 districts below average in instruction in 1954 and at the same time received less than average TRS assistance in 1955.

IV. SUMMARY

In brief then, the TRS reduced the variability in mill rates that existed in 1954 but it did not establish a qualifying mill rate of 25 mills which was its objective. It gave the greatest assistance to those who spent the most in 1954 and, in theory at least, it could benefit uneconomic spending. In this respect, it is interesting to note that an experienced secretary of 25 years criticized the scheme on this basis on page 57. The evidence shows that the TRS counteracted the equalization grants in existence at that time. The TRS did nothing to remedy the discrepancies in instructional expenditures nor the weaknesses in grant distribution which were present in 1954.

Since mill rates were, on the average, reduced in 1955 and since expenditures per classroom increased in 1955, one might conjecture that it did not necessarily check spending but merely gave tax relief to

property owners. This tax relief was most acceptable to those districts which were able to qualify for relatively large TRS grants.

CHAPTER VII

CONCLUSIONS

The strengths and weaknesses of the TRS scheme have been examined. With respect to the criteria adopted, the scheme had decided weaknesses.

From an administrative point of view, the findings may be segregated into those affecting local school authorities and those affecting the Department of Education.

In the first place, local boards and their staffs spent much time and effort trying to interpret what they found to be a complex scheme. This complexity tended to make the scheme costly to administer--costly in staff man-hours. Even after the formula was understood, boards spent much time and effort on budgeting. There appeared to be major problems in planning their budgets so that they might qualify for the subsidy. Boards spent much time preparing claims which would (they hoped) be approved by the Department of Education. The scheme was hurriedly put into effect because the TRS legislation had not been completed until after or about the usual time for preparing budgets. This lack of warning along with difficulties of interpretation forced the Department of Education to take a more active part in the affairs of local government.

The effects on the Department of Education were similar in some respects. The difficult problem of interpreting the scheme, the incomplete claim forms and the unsatisfactory budgets resulted in much work for the Department of Education. The Department either added extra staff or recalled staff from other duties to cope with the problems. The complexity of the scheme meant added government expenditures on such items

as correspondence, extra help (or reduced services) and traveling expenses.

The TRS formula was not definite in its application. It did not take into account surpluses and the department had to deal with them in the best way possible. This is also indicated by the arbitrary setting of figures in the claims which could not be completed for one reason or another. Thus the subjective treatment of some of the more difficult claim forms introduced embarrassment because it had been said that there would be no arbitrary setting of mill rates. In some cases there seemed to be no alternative.

The evidence indicates that the TRS scheme saddled the Department of Education and the local boards with a colossal and difficult task. One can say with some degree of certainty that confusion did exist over the interpretation and completion of the claim forms and more particularly with that portion of the claim which dealt with the analysis of the deficit. Thus the findings of this examination, respecting administrative difficulties, are not at variance with the opinions of those people who from the beginning openly opposed the scheme.

One of the criteria originated from the foundation program concept required a qualifying mill rate of 25 mills. The findings show that the TRS failed to establish a qualifying rate of 25 mills. It did, however, reduce the variability in mill rates as indicated by the significant decrease in the standard deviations of mill rates in 1955 as compared to 1954. This improvement in mill rate variability was offset, however, by the fact that tax relief was not equitably distributed. The correlation of .50 between tax relief from the TRS and ability differs

significantly from the correlation of one between tax relief from flat grants and ability. A flat grant would have been more effective because it would have given greater tax relief to the poorer districts.

Another criterion which was developed from the foundation program concept required the establishment of a basic instructional program of $3,710 per classroom. The findings show that the actual TRS payments differed greatly from the hypothetical foundation program payments. By comparison, the TRS by itself did not contribute anything to the foundation program principle of guaranteeing sufficient funds for this basic program. Since the richer districts benefited more from the TRS than they would have if the money had been distributed by the foundation program plan, less money was available for the poorer districts; the poorer districts were compelled to levy higher mill rates in order to provide a basic program under the TRS scheme.

One final criterion from the foundation program concept required a correlation of one between aid and ability. The TRS payments per classroom correlated .01 with assessments per classroom. A flat grant correlates .50 with the same measure of ability. Hence the findings strongly suggest (1) the actual TRS payments were not only unrelated to ability but were counteractive to the equalization principle; and (2) a flat grant would have been more effective in equalizing aid. It should be noted that flat grants are not by implication recommended as a means of distributing aid, but were used for comparative purposes only.

In total consequences, the findings show that the TRS did not remedy the weaknesses in the grant system in effect in 1954 because (1) mill-rate variability continued to exist in 1955; (2) instructional

programs varied to a greater extent in 1955 than those in 1954 and this seemed to be attributable to the TRS in many instances; (3) the actual equalization grants were counteracted; (4) it could have rewarded those districts which spent freely and unwisely in 1954; (5) the TRS did little to improve the below average expenditures on instruction of 1954.

In summary then, it seems pertinent that any future scheme of a similar nature needs careful consideration in the light of the weaknesses and dangers attributed to the TRS in this thesis.

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APPENDIX I

The School Grants Act, 1945

Regulations Relating to the Payment of Grants

THE SCHOOL GRANTS ACT, 1945

REGULATIONS RELATING TO THE PAYMENT OF GRANTS

PART I

SECTION 1

(1) There shall be paid to the Board of each school district or school division annually, a grant of One Thousand Dollars ($1,000.00) per year with respect to:

(a) Each teacher in charge of a classroom in which instruction is given to Grades 1 - 6 (elementary) ......

SECTION 2

(1) There shall be paid a grant equal to forty percent (40%) of the Board's actual expenditures for the conveyance of pupils under the provisions of Part X of the School Act. The Board's expenditures shall include such costs as may be approved by the Minister.

(2) There shall be paid a grant equal to forty-five percent (45%) of the Board's expenditures made to parents or guardians for the conveyance or maintenance of pupils under the provisions of Part X of the School Act ......

SECTION 3

(1) (a) There shall be paid with respect to the net enrolment of pupils in the schools of the district or divisions the sum of Ten Dollars ($10.00) per annum for each pupil.

(b) A Pupil Equalization grant shall be paid with respect to the net enrolment of pupils according to the following schedule:

(i) To each City or Town School District in which the average assessment per classroom is less than $110,000.00,

and to each Village School District in which the average assessment per classroom is less than $115,000.00 and to each Consolidated School District in which the average assessment per classroom is less than $120,000.00, the sum of $1.00 per annum, per pupil;

(ii) To each Rural School District or School Division according to the following schedule:

Average Assessment per Classroom	Rate per annum, per pupil
Less than $40,000.00	$9.00
$40,001.00 to 50,000.00	8.00
50,001.00 to 60,000.00	7.00
60,001.00 to 70,000.00	6.00
70,001.00 to 130,000.00	3.00

(iii) The average assessment per classroom shall be determined according to the provisions of Section 4. ......

SECTION 4

Equalization grants shall be paid as follows:

(a) To each city or town school district, for each $1,000.00 by which the average assessment per classroom is less than $110,000.00, the sum of $14.00 per classroom.

(b) To each village school district, for each $1,000.00 by which the average assessment per classroom is less than $115,000.00, the sum of $14.00 per classroom.

(c) To each consolidated school district, for each $1,000.00 by which the average assessment per classroom is less than $120,000.00, the sum of $19.00 per classroom.

(d) To each rural school district or school division, for each $1,000.00 by which the average assessment per classroom is less than $130,000.00, the sum indicated in the following schedule:

Average Assessment		Rate per Classroom
Less than	$40,000.00	$23.00
$40,001.00 to	50,000.00	22.00
50,001.00 to	60,000.00	21.00
60,001.00 to	70,000.00	20.00
70,001.00 to	130,000.00	19.00

(e) The Minister may declare, for purposes of this section, whether any school district shall be considered as a town, village, consolidated or rural district.

(f) The average assessment per classroom, for purposes of this section, shall be determined by dividing the total number of classrooms into the total assessment of the district or division, both as defined hereunder.

(g) The total assessment for purposes of this section shall be the total of the assessments, exclusive of nominal values, reported to the secretary of the district or division by the municipal authorities for requisitioning purposes pursuant to sections 283 and 296 of the School Act, 1952.

(h) For the purpose of determining the number of classrooms to be used under clause (f) hereof, each teacher for whom grant is paid under subsection 1 of section 1, shall be counted as a room and there shall be added further rooms or fractions of

rooms as follows:

For each district from which pupils are conveyed to another district, or with respect to which the Board pays an allowance under Part X of the School Act:

(1) For 6 to 14 pupils, inclusive ________________________ .30 rooms

(11) For 15 to 29 pupils, inclusive ________________________ .50 rooms

(111) For 30 to 59 pupils, inclusive ________________________ .70 rooms

(IV) For each additional 30 pupils
or fractional part of 30 ____________________________ .20 rooms

provided that if the number of pupils is less than 6,
each pupil shall be considered as _____________________ .05 rooms

with respect to a consolidated school district, each district thereof shall be regarded as an individual district for the purposes hereof. With respect to a school district not included in a division, each pupil enrolled in any of Grades IX to XII inclusive in the school of an adjacent district, for whom the district pays the full amount of his tuition fees, and who is not otherwise included in this section, shall be considered to be .02 of a room. ......

APPENDIX II

Claim for Tax Reduction Subsidy Grant and the Analysis of 1954 Deficit

Claim for Tax Reduction Subsidy Grant
(Attach to Budget)

A. Total Assessment, December 31, 1953 ______________

B. Capital Expenditure out of Current Revenue, 1954 ______________

C. Number of Mills Applicable to Capital Expenditure out of Current Revenue, 1954

$$\frac{B}{A} \times 1{,}000$$ ______________

D. Requisition Mill Rate, 1954 ______________

E. C or 2.5 mills whichever is the lesser ______________

F. Mill Rate Excluding Capital Expenditure Out of Current Revenue (D - E) ______________

G. Total Amount of Operational Deficit for 1954 (Do not include deficit attributable to capital expenditure) (Attach Analysis of Deficit Form) ______________

H. Number of Mills Applicable to Deficit

$$\frac{G}{A} \times 1{,}000$$ ______________

I. Qualifying Mill Rate (F + H) ______________

J. Number of Mills for Tax Reduction Subsidy (I - 25) ______________

K. Total Assessment, December 31, 1954 (Certificate of Assessment) ______________

L. Amount of Tax Reduction Subsidy Grant

$$\frac{J}{1{,}000} \times K$$ ______________

Signed:

____
Secretary-treasurer

____________________ School District
Division No. ____________

ANALYSIS OF 1954 DEFICIT

(Based on 1954 Financial Statement)

Amount of 1954 Operational Deficit not Attributable to Capital Expenditure Provided out of Current Revenue __________
(This amount is to be entered in Section G of Claim for Tax Reduction Subsidy Grant, and is subject to review by the Department.)

Amount of 1954 Deficit Attributable to over-expenditure for Capital out of Current Revenue. __________

Total Amount of 1954 Deficit.
(This total should agree with 1954 Financial Statement.) __________

Set forth in the space below a detailed analysis of the reasons for the above deficit, being specific as to the extent it is attributable to over-expenditure for capital purposes from current revenue.

Attach to Claim for Tax Reduction Subsidy Grant.

This space reserved for Departmental Use.

APPENDIX III

Comparison of Two Measures of Ability to Pay Assessment per Classroom and Assessment per Pupil

TABLE XI

ASSESSMENT PER OPERATING UNIT - DIVISIONS AND COUNTIES

Divisions and Counties (1)	Assessment (to nearest thousand) (2)	Assessment and Classroom Data No. Operating Classrooms (3)	Assessment per Operating Classroom (4)	Rank Order of Ability (5)	Assessment and Enrollment Data Enrollments (6)	Assessment Pupil (7)	Rank Order Ability (8)	D (9)	D^2 (10)
Grande Prairie	8,449	80	105,612.50	35	1,984	4,258	36	1	1
Vulcan	15,649	67	233,567.16	6	1,641	9,536	5	1	1
Ponoka	12,673	99	128,010.10	28	2,731	4,640	32	1	16
Newell	3,824	66	57,939.39	55	1,693	2,258	54	1	1
Warner	11,498	77	149,324.67	18	2,057	5,589	22	4	16
Stettler	11,300	60	188,333.33	9	1,528	7,395	10	1	1
Thorhild	8,788	60	146,466.66	19	1,592	5,520	23	4	16
Berry Creek	2,291	14	163,642.85	12	152	15,072	2	10	100
St, Mary's River	11,569	111	104,225.22	36	2,633	4,393	35	1	1
Foremost	7,449	51	146,058.82	21	1,242	6,239	15	6	36
Medicine Hat	5,892	66	89,272.72	43	1,099	5,839	18	25	625
Taber	11,292	101	111,801.98	33	2,656	4,251	37	4	16
Lethbridge	12,909	134	96,335.82	39	3,628	3,558	42	3	9
Acadia	4,458	43	103,674.41	37	818	5,449	24	13	169
Sullivan Lake	2,914	32	91,062.50	42	469	6,213	16	26	676
Peace River	7,491	86	87,104.65	44	2,365	3,167	44	0	0
Lac St. Anne	6,094	79	77,139.24	47	2,221	2,743	48	1	1
Edson	4,777	69	69,231.88	50	2,026	2,357	52	2	4
Clover Bar	38,763	67	578,552.23	1	2,072	18,708	1	0	0
Rocky Mtn. House	4,142	71	58,338.02	54	1,733	2,390	51	3	9
Neutral Hills	3,357	26	129,115.38	27	628	5,345	25	2	4
Holden	12,020	101	119,009.90	30	2,414	4,979	30	0	0
Lamont	12,120	90	134,666.66	25	2,468	4,910	6	6	36
Vegreville	12,616	80	157,700.00	14	2,336	5,400	25	11	121
Camrose	15,713	105	149,647.61	17	2,748	5,644	20	3	9
Two Hills	8,663	77	112,506.49	31	2,291	3,781	41	10	100
Killam	10,983	71	154,690.14	16	1,935	5,675	19	3	9
Stony Plain	11,049	104	106,240.38	34	2,873	3,845	39	5	25
Sturgeon	12,004	90	133,377.77	26	2,404	4,993	29	3	9
Vermilion	17,215	110	156,500.00	15	2,677	6,430	14	1	1
Castor	6,909	51	135,470.58	24	1,047	6,598	13	11	121
Macleod	15,340	62	247,419.35	4	1,733	8,851	7	3	9
Pincher Creek	6,414	40	160,350.00	13	880	7,288	11	2	4
Drumheller	8,190	35	234,000.00	5	794	10,314	3	2	4
Olds	13,654	78	175,051.28	10	2,426	5,628	21	11	121
Wainwright	9,654	66	146,272.72	20	1,574	6,133	17	3	9
Provost	7,548	45	167,723.33	11	1,081	6,982	12	1	1
Red Deer	13,136	131	100,274.80	38	3,120	4,210	38	0	0

TABLE XI (continued)

Divisions and Counties (1)	Assessment (to nearest thousand) (2)	Assessment and Classroom Data No. Operating Classrooms (3)	Assessment per Operating Classroom (4)	Rank Order of Ability (5)	Assessment and Enrollment Data Enrollments (6)	Assessment per Pupil (7)	Rank Order of Ability (8)	D (9)	D^2 (10)
Wetaskiwin	8,769	73	120,123.28	29	1,953	4,490	33	4	16
Westlock	7,834	85	92,164.70	41	2,357	3,323	43	2	4
Foothills	12,426	40	310,650.00	2	1,366	9,096	6	4	16
Smoky Lake	5,034	63	79,904.76	45	1,714	2,936	47	2	4
Wheatland	13,862	65	213,261.53	7	1,620	8,556	9	2	4
Calgary	18,867	76	248,250.00	3	1,970	9,577	4	1	1
Athabasca	6,114	90	67,933.33	51	2,397	2,550	49	2	4
St. Paul	5,006	80	62,575.00	53	2,171	2,305	53	0	0
Bonnyville	4,602	93	49,483.87	56	2,644	1,740	56	0	0
Spirit River	5,514	72	76,583.33	48	1,768	3,118	45	2	4
High Prairie	6,297	87	72,379.31	49	2,569	2,451	50	1	1
Strawberry (Leduc)	18,355	128	143,398.43	23	3,409	5,384	26	3	9
Fairview	4,684	49	95,591.83	40	1,224	3,826	40	0	0
Lac La Biche	1,704	56	30,428.57	58	1,402	1,215	58	0	0
Fort Vermilion	151	9	16,777.77	59	217	695	59	0	0
East Smoky	776	19	40,842.10	57	504	1,539	57	0	0
Red Deer Valley	2,178	28	77,785.71	46	707	3,080	46	0	0
Lacombe	15,687	108	145,250.00	22	2,984	5,257	28	6	36
Coal Branch	2,242	20	112,100.00	32	507	4,422	34	2	4
Barrhead	4,743	70	67,757.14	52	2,119	2,238	55	4	16
Three Hills	13,708	70	195,828.57	8	1,590	8,621	8	0	0

Source: Columns (2) and (3)
Data from 1956 Annual Report - Department of Education
Columns (4) to (10) inc. calculated.
Rank order correlation between assessment per classroom

and assessment per pupil in average daily attendance

$$r = 1 - \frac{6 \Sigma D^2}{N(N^2-1)} \text{ where } \Sigma D^2 = 2393 \text{ and } N = 59$$

gives a correlation of .93[1].

[1] Garrett, *op. cit.*, p. 355.

APPENDIX IV

Grants Payable 1956

TABLE XII

GRANTS PAYABLE - 1956

County or Division (1)	As Per Section 1 (2)	As Per Section 2 (3)	As Per Section 3 (4)	As Per Section 4 (5)	Tax Re'tion Subsidy (6)	Assessment Dec. 31/54 (7)
Grande Prairie	84,080	26,422.74	29,875	112,970.71	50,621.79	8,407,224
Vulcan	69,350	69,085.16	16,410	--------	53,567.39	15,422,083
Ponoka	104,540	44,774.10	35,503	92,682.79	69,698.80	12,672,510
Newell	66,870	36,698.63	30,474	173,817.82	142,137.30	3,823,979
Werner	83,250	38,669.75	26,741	24,135.99	108,725.25	11,617,195
Stettler	59,620	45,398.64	19,180	--------	50,324.56	11,162,735
Thorhild	66,580	36,654.49	20,696	47,899.35	65,121.56	8,788,275
Berry Creek	13,640	4,798.19	3,184	27,680.87	350.40	815,451
St. Mary's River	122,480	40,991.29	34,229	134,299.54	119,741.13	114,447,191
Foremost	52,080	44,618.78	16,146	50,442.04	30,316.62	7,028,222
Medicine Hat	64,040	24,940.04	20,184	118,383.91	58,915.28	4,874,248
Taber	114,410	45,545.57	33,566	142,168.64	147,161.03	11,172,347
Lethbridge	142,760	73,459.10	47,164	198,783.21	175,562.11	12,875,979
Acadia	40,140	22,345.13	18,488	72,403.80	17,473.87	3,545,432
Sullivan Lake	29,990	9,951.29	8,773	59,037.84	38,492.23	2,103,413
Peace River	87,100	39,679.03	37,840	164,101.71	3,712.50	7,725,580
Lac St. Anne	78,530	55,620.61	37,757	168,020.53	42,596.43	6,029,310
Edson	72,550	44,286.99	34,442	156,025.65	101,612.63	4,730,875
Clover Bar	80,920	29,684.84	22,010	--------	--------	38,987,789
Rocky Mtn. House	73,050	24,807.31	31,194	160,253.41	62,128.50	4,116,200
Neutral Hills	26,640	22,210.97	10,548	51,581.74	15,944.21	2,529,110
Holden	97,680	46,157.33	29,705	88,350.79	51,426.16	11,766,493
Lamont	96,690	54,135.99	32,084	91,937.71	64,842.48	12,109,690

TABLE XII (continued)

GRANTS PAYABLE - 1956

County or Division (1)	As Per Section 1 (2)	As Per Section 2 (3)	As Per Section 3 (4)	As Per Section 4 (5)	Tax Re'tion Subsidy (6)	Assessment Dec. 31/54 (7)
Vegreville	85,180	61,389.84	30,368	45,422.52	59,927.52	13,123,449
Camrose	111,820	77,300.11	36,192	85,054.12	39,282.77	15,692,978
Two Hills	82,810	58,027.15	29,783	124,708.21	72,858.52	8,697,204
Killam	74,580	52,002.06	25,155	45,559.32	73,034.13	11,382,224
Stony Plain	103,940	47,068.56	46,049	131,157.88	69,943.10	11,019,963
Sturgeon	95,850	59,431.12	31,252	70,410.90	124,837.58	12,003,013
Vermilion	111,900	55,347.92	40,756	29,157.15	30,987.86	17,276,390
Castor	53,650	34,794.71	13,611	45,260.34	72,543.81	7,104,482
Macleod	67,530	49,369.70	17,330	--------	13,806.09	15,195,500
Pincher Creek	40,960	16,815.28	11,440	14,455.78	6,670.22	6,688,399
Drumheller	35,260	22,569.35	7,940	--------	525.64	8,295,526
Olds	97,900	43,834.61	31,538	33,621.20	86,717.58	13,634,362
Wainwright	66,990	36,041.70	20,462	32,295.03	77,234.53	10,049,058
Provost	48,610	36,621.35	14,053	27,797.96	32,303.51	7,420,550
Red Deer	144,370	38,249.55	43,887	130,247.48	84,466.28	15,108,155
Wetaskiwin	78,190	65,632.49	27,456	95,702.56	149,646.57	9,264,149
Westlock	87,430	46,596.64	37,712	152,204.90	35,254.08	8,036,339
Foothills	54,830	39,716.82	13,660	--------	13,047.45	12,426,144
Smoky Lake	72,530	43,342.49	29,138	160,118.16	69,375.07	5,019,775
Wheatland	68,210	58,505.20	16,200	--------	28,278.68	14,182,553
Calgary	77,560	62,721.45	19,700	--------	42,469.35	18,856,577
Athabasca	91,730	58,857.96	43,146	238,978.39	31,719.79	5,955,764
St. Paul	78,830	48,923.52	47,778	193,173.23	44,449.39	4,650,783
Bonnyville	94,220	51,350.72	50,236	276,586.80	23,008.75	4,475,100
Spirit River	72,530	17,378.81	30,056	142,884.70	30,326.68	5,224,437
High Prairie	85,090	30,772.66	42,449	169,982.21	28,390.97	6,545,694

TABLE XII (continued)

GRANTS PAYABLE - 1956

County or Division (1)	As Per Section 1 (2)	As Per Section 2 (3)	As Per Section 3 (4)	As Per Section 4 (5)	Tax Re'tion Subsidy (6)	Assessment Dec. 31/54 (7)
Leduc	136,100	64,268.30	44,317	66,890.24	165,199.36	18,301,885
Fairview	50,080	32,112.23	19,584	93,903.00	47,168.18	4,789,011
Lac La Biche	54,020	22,475.67	26,638	171,557.24	7,669.96	1,664,755
Fort Vermilion	10,430	1,716.37	7,772	31,969.52	1,466.35	198,320
East Smoky	18,690	3,977.99	14,976	53,060.62	5,816.81	728,975
Red Deer Valley	29,990	7,484.92	11,312	47,578.75	8,755.90	2,178,085
Lacombe	114,070	45,232.91	38,792	55,743.81	120,793.35	15,678,349
Coal Branch	19,860	7,637.55	6,591	13,352.44	23,674.20	2,241,875
Barrhead	75,120	35,038.70	38,142	195,468.50	23,712.61	4,646,223
Three Hills	71,640	35,805.43	16,700	--------	40,948.43	13,823,545
TOTALS	4,389,490	2,349,347.81	1,578,364	5,109,281.01	3,272,783.48	

Actual Payment High Prairie 1956	-	$343,025.98
Actual Grant Earned	-	328,293.87
Over Payment	-	14,732.11
To be recovered - 1957	-	7,000.00
- 1958		7,732.11
		14,732.11

Source: On file at the Department of Education, Edmonton, Alberta
Claim for Regular Grant Payable in Fiscal Year Ending March 31st, 1957
Based on Operational Statistics of School Year commencing July 1st, 1954
Form 315-1

APPENDIX V

Comparative Expenditures on Instruction
for 1954 and 1955

TABLE XIII

COMPARATIVE EXPENDITURES ON INSTRUCTION FOR 1954 AND 1955

Division or County	1954 Instruction per Class-room (2)	Above or Below $3340 (3)	1955 Instruction per Class-room (4)	Above or Below $3710 (5)	Above or Below the Average TRS of $783.71 (6)
Grande Prairie	$2965.83	-	$3394.47	-	-
Vulcan	3701.39	+	3869.72	+	+
Ponoka	3477.31	+	3739.56	+	-
Newell	3170.62	-	3584.44	-	+
Warner	3354.32	-	3945.72	+	+
Stettler	3218.99	-	3558.72	-	+
Thorhild	4148.56	+	3960.55	+	+
Berry Creek	3246.55	-	3241.02	-	-
St. Mary's River	3796.04	+	3904.10	+	+
Foremost	3287.46	-	3632.94	-	-
Medicine Hat	3007.41	-	3535.13	-	+
Taber	4162.66	+	4380.25	+	+
Lethbridge	3534.09	+	3572.77	-	+
Acadia	3372.01	-	3291.00	-	-
Sullivan Lake	3633.14	+	3645.68	-	+
Peace River	3261.94	-	3324.28	-	-
Lac Ste. Anne	3266.96	-	3541.06	-	-
Edson	3482.30	+	4173.44	+	+
Rocky Mtn. House	3237.62	-	3498.92	-	-
Neutral Hills	3202.50	-	3741.93	+	-
Holden	3262.29	-	3409.55	-	-
Lamont	3517.43	+	3933.32	+	-
Vegreville	3781.31	+	3997.22	+	-
Camrose	3348.84	-	3505.94	-	-
Two Hills	3825.79	+	3938.13	+	+
Killam	3710.21	+	3817.35	+	+
Stony Plain	3510.12	+	3600.92	-	-
Sturgeon	3588.65	+	3865.29	+	+
Vermilion	3179.93	-	3338.79	-	-
Castor	3396.33	-	3596.49	-	+
Macleod	3582.56	+	3906.77	+	-
Pincher Creek	3446.20	-	3577.35	-	-
Drumheller	3491.47	+	3728.67	+	-

TABLE XIII (continued)

Division or County	1954 Instruction per Class room (2)	Above or Below $3340 (3)	1955 Instruction per Class-room (4)	Above or Below $3710 (5)	Above or Below the Average TRS of $783.71 (6)
Olds	$3460.66	-	$4359.55	+	+
Wainwright	3568.81	+	3908.73	+	+
Provost	3232.81	-	3536.92	-	-
Red Deer	3761.50	+	3688.25	-	-
Wetaskiwin	3323.87	-	3520.18	-	+
Westlock	3173.19	-	3463.75	-	-
Foothills	3697.66	+	4936.03	+	-
Smoky Lake	3728.61	+	4295.30	+	+
Wheatland	3897.08	+	4005.41	+	-
Calgary	3514.72	+	3920.64	+	-
Athabasca	3251.75	-	3524.50	-	-
St. Paul	2980.51	-	3260.25	-	-
Bonnyville	2999.48	-	3364.64	-	-
Spirit River	3043.66	-	3272.90	-	-
High Prairie	3188.34	-	3391.62	-	-
Strawberry	3179.19	-	3917.46	+	+
Fairview	3171.45	-	3310.77	-	+
Lac La Biche	2815.43	-	2822.64	-	-
Fort Vermilion	2865.31	-	3767.32	+	-
East Smoky	2890.77	-	3437.62	-	-
Red Deer Valley	3837.86	+	4071.07	+	-
Lacombe	3858.82	+	4465.92	+	+
Coal Branch	3797.95	+	3707.76	-	+
Barrhead	3174.57	-	3710.00	0	-
Clover Bar	4293.23	+	3979.79	+	-

Source: Column (2) Annual Report 1955.
Column (4) Annual Report 1956.
Columns (3) and (5) calculated.

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